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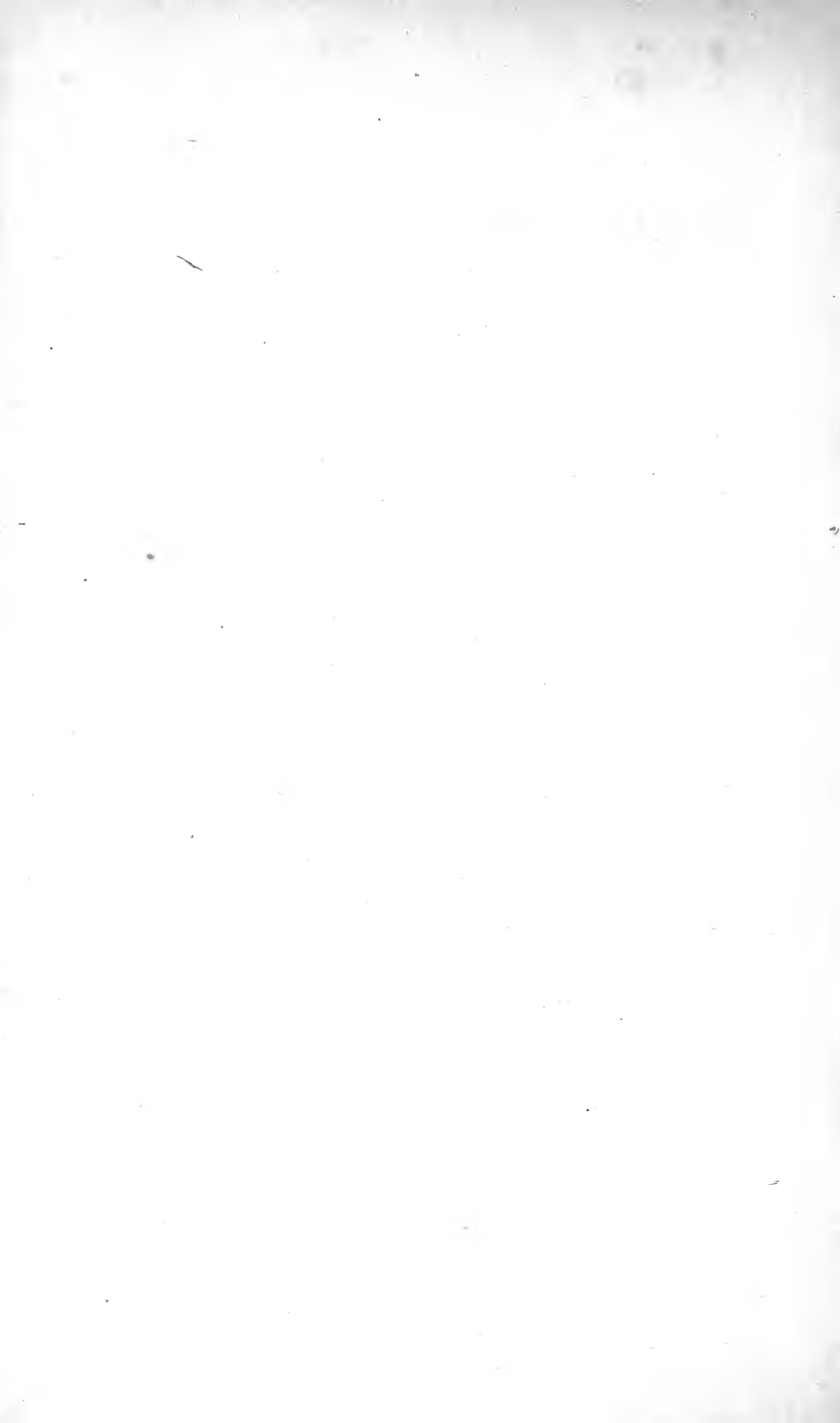


Alexander Wetmore
1946 *Sixth Secretary* 1953
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G. Wetmore



NATURAL HISTORY OF IRELAND.



THE
NATURAL HISTORY
OF
IRELAND.

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VOL. II.  
BIRDS,  
COMPRISING THE ORDERS  
RASORES & GRALLATORES.

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BY
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P R E F A C E.

THE first volume of this work comprises the various species of birds which are included in the Orders *Raptores* and *Insessores*. Under the former, are included the several species of the families of the eagles, vultures, and owls;—under the latter, those of the families of the shrikes, flycatchers, thrushes, warblers, tits, wag-tails, pipits, waxwings, larks, buntings, finches, starlings, crows, woodpeckers, creepers, cuckoos, bee-eaters, kingfishers, swallows and night-jars.

The present volume likewise contains the birds of two orders,—*Rasores* and *Grallatores*.* Under the former, the families of the pigeons, grouse, and bustards are included,—under the latter, those of the plovers, herons, the various genera comprised in the family *Scolopacidae*, as the curlews, sandpipers, godwits, snipes, &c.; the families of the rails and phalaropes.

* The species comprised in the three Orders, *Raptores*, *Insessores*, and *Rasores*, were treated of by the author some years ago—but much less fully than in the present work—in a series of papers commencing in the second volume of the ‘Magazine of Zoology and Botany’ in 1838, and continued occasionally in the ‘Annals of Natural History’ until 1843. None of the matter on the Orders *Grallatores* and *Natatores* (which latter will be embraced in the third volume) has hitherto been published, excepting notices of a very few species recorded as additions to the Fauna of Ireland in the excellent journal already named.

Attractive and varied as are the birds included in the first volume, it does not treat of any one that is sought after by the British sportsman. The present volume, on the contrary, contains all those which are the objects of his pursuit, excepting the web-footed species (*Anatidæ*).

Belfast Bay being so frequently mentioned in this volume, it may be proper briefly to state that its length is about twelve miles and a half;* its breadth, to seven miles below the town, little exceeds three miles in any part; but thence it gradually expands on either side to the width of six miles and a half at the entrance. The river Lagan, having a considerable volume of water, falls into the bay at Belfast, and the flowing tide ascends it for two miles above the lowest bridge. Within little more than four miles of the town nearly all our grallatorial birds are obtained, three-fifths of the banks of the estuary within that distance being laid bare by every ebbing tide;—as four-fifths were, previous to the embankment made on each side for railways within the last few years. These banks, excepting on some very limited portions of the Down shore, on which hard sand prevails, are wholly of a soft oozy nature, on which the grass-wrack (*Zostera marina*) grows profusely. From the shores of the bay below this distance (four miles) to its entrance, the tide does not recede very far, and where it does so, banks of sand chiefly prevail, varied in some places by beds of gravel, stones, or rocks. Both sides of the bay are sheltered by ranges of hills, which rise on the western side, at M'Art's Fort, to 1,181 feet, and on the eastern, above Holywood House, to 530 feet in height. The ridge of hill behind Garnerville, over which the wigeon generally, and different species of the grallatorial birds, occasionally fly to the quietude

* Geographical or "Sea-miles" of Capt. Beechey's Chart of Belfast Bay.

of Strangford Lough from the unintentional disturbance or the persecution which they experience in Belfast Bay, is 333 feet in height; but the latter species usually take a course a little more to the southward, where the hills are of less elevation. The land intervening between the two haunts of the birds is about eight miles and a half in extent.

Strangford Lough, which is occasionally alluded to, covers, exclusive of its islands, a somewhat similar area to Belfast Bay, and, like it, possesses a great extent of soft oozy soil at low water. There is also much sand, gravel, stones, and, towards the entrance, a low rocky coast.

Although the same species of birds frequent the two localities, these are of a very different configuration, Belfast Bay opening widely at its entrance towards the north-east, and Strangford Lough having a narrow river-like entrance nearly five miles in length opening towards the south. It is also studded with very numerous islands, while the other is islandless (one or two petty little islets near the shore being unworthy of forming an exception). The Copeland Islands lie outside its entrance. A considerable river, too, comparatively with the size of the locality, flows into Belfast Bay, while Strangford Lough is not supplied with any stream of much volume. Hence, its waters are much more saline than those in at least the upper half of the more northern bay.

The following additional information, thought worthy of a place here, has been obtained while this volume was passing through the press :—

ASH-COLOURED HARRIER.—*Circus cineraceus*, Mont. (sp.) A second individual of this species (the first is noticed in vol. i. p. 427) was shot about the 1st of October, 1849, at the Scalp, county of Wicklow, and procured for the Dublin University Museum. The stomach of the bird contained the remains of frogs. Its sex was not looked to by the preserver, but judging from Jenyns' description (p. 90), it is a female nearly in full adult plumage. To that description it is only necessary to add the following notes of the *individual*. Nape rufous-white; "above and below the eye, a streak of dull white;" wing-coverts with broad ferruginous markings. The tail-feathers generally have five bands of dark brown, alternating with which the central pair have four bands of very dark greyish-brown, which colour prevails on the outer web of the feather next to them, but on its inner web these bands are rufous. This colour, but of a brighter tint, is exhibited throughout the same bands of the four outer tail-feathers on each side.

ROLLER.—*Coracias garrula*, Linn. In addition to what appears at vol. i. p. 366, respecting this bird's occurrence in Ireland, I have to state on the authority of the Earl of Courtown, that his gamekeeper shot one at Courtown, co. Wexford, on the 6th of October, 1849. The bird having been sent to Mr. Glennon, of Dublin, to be preserved, I was informed to that effect by Mr. Warren, and through the kindness of the nobleman just named, learned when and where it was obtained. The specimen is in nearly adult plumage.

BLACK GROUSE.—At p. 37, it is remarked that I had not heard of the success attendant on the introduction of six brace of these birds procured in Scotland by Lord Courtown's gamekeeper and turned out on his lordship's estate in the south of Ireland. I have, however, through the polite attention of that nobleman, since learned that these birds remained quiet in the wood in which they were set at liberty in

the autumn, until the following spring, when they totally disappeared. A strict search was made for them, but in vain. It was imagined that they might have taken flight to the Wicklow hills, about five miles from the place in which they were, and have been shot there.

RED GROUSE.—(Varieties in colour) see p. 47. *November 1849.*—I saw in the shop of Mr. Glennon, bird-preserver, Dublin, two specimens exhibiting a great deal of fawn-colour in their plumage, a few feathers only, on the belly, being of the ordinary fine rich brown. They are extremely similar to each other, probably of the one brood, and were killed at the same place. The colours have such a patch-work appearance that they cannot be well described. The usual dark brown is replaced by very pale dull brown, and the black markings by others of a dusky hue. A uniform very pale yellowish fawn-colour appears in irregular patches from head to tail, both on the upper and under surface of the body; about as much being of this colour as of the mixed brown, with dusky markings. These birds presented no beauty of appearance.

Another variety which I saw in the same place was remarkably handsome, owing to pale grey or white taking the place of brown throughout its entire plumage, and all the black markings remaining as usual. It was thus like a ptarmigan (*T. lagopus*) in summer plumage. Another bird quite similar to this had been received in a previous year by Mr. Glennon, but from a different county. All these varieties were killed in Ireland.

THE QUAIL (see p. 66) is so little known in Great Britain, comparatively to what it is in Ireland, that the following detailed observations are given here as supplementary to those contained in another part of this volume:—they were made subsequently to its being printed. *Holywood House, County Down, 1849.*—As this place, where I resided in the summer and autumn of the present year, is a favourite locality for quails—perhaps as much so as any in Ireland, I embraced the opportunity of making various notes upon the species, of which the following is the result. During the month of August, from morning

until evening, I frequently, about the same moment, heard from various directions within about twelve acres* of wheat and oats, the calls of six or seven quails, and presumed that so many pair were within that space. A low hoarsely-guttural double note immediately preceded the well-known call of *wet-my-foot*, from those which were very near to me.

During the reaping of oats here on the 1st of September, two nests of quails were found. In one were ten eggs, and in the other the same number, with the addition of a young bird just hatched. On visiting them a few days afterwards, the young were found to have escaped from the former, the chipped shells being in the nest; but the latter was deserted, the young bird lying dead, and the eggs quite cold. Another nest, with the young, one or two days "out," was found on the 5th of September, within forty yards of the latter. The oats were left standing around it for protection, though all the rest in the field were cut. On my going to it in the evening the old bird rose from the nest, *in which* the whole of the young (about ten or twelve in number) were;—when disturbed they ran nimbly away. The nest was composed of grasses and wild mustard (*Sinapis arvensis*). In course of wheat being reaped to-day in the lower portion of the same field, another very young brood, similar in number to the last, was seen with the old bird. The young from these four nests (three in oats and one in wheat) would have been brought forth about the same day. All may, I consider, be regarded as second broods, there having apparently been nothing to prevent the first being brought to maturity. What are believed to be the second nests are annually discovered here when the grain is being cut, which generally takes place in the month of August;—the present has been a very late season. The pair of old quails rose from the site of each of the four nests before the reapers; and a fifth pair, having neither nest nor young, was sprung from the oats. These birds were inhabiting an extent of grain covering about twenty-five acres.

A man who has mown the early meadows (rye-grass and clover) here

* The Cunningham or Scotch acre is meant throughout.

for the last five years, has always laid bare nests of the quail in his progress, or seen broods of young. This occurs generally in the middle of June, though so late this year as about the 1st of July. He then saw three or four nests or broods; one of the latter being apparently three weeks old. There was but little ground under meadow this season, but when there has been from twenty-five to thirty acres, ten or twelve nests would be observed. He considers the quail an early-breeding bird.*

The colours of the quail sometimes appear very striking when the bird is about alighting near one with its back towards him. I have seen the rich yellow and brown dorsal markings exhibited in straight lines alternately down the back, giving it altogether a striped appearance, which, though formal, looked singular and beautiful.

At Mertoun, in the same district as Holywood House, a pointer dog had to be kept chained this season on account of the service which he was considered to render to an English terrier in killing quails. The two sallied out together early in the morning, and when the former "pointed" the quails, the terrier rushed before him to seize one. They were casually observed to act thus in a clover field, though a capture was not effected on that occasion; the terrier was several times seen with these birds after returning from such excursions. Quails often lie so close that, doubtless, they could occasionally be thus taken.† Several times when I have been walking on the borders of meadows, my dog has picked up a land-rail as it ran close to my feet.

* Mr. R. Ball has known quails' nests to be commonly exposed to view in the south of Ireland during the mowing of grass and clover early in the summer.

† Since the preceding matter was put in type, I have had the following confirmation that the quail can be so captured, from Robert Taylor, Esq., of Belfast, who resided some time at Corfu:—"One mode of taking quails, which I frequently witnessed during the course of my walks through the fields of Corfu, I had never read of, and struck me as very singular. A man, armed with a gun, and accompanied by a peculiar-looking dog—a kind of lurcher—proceeded slowly through the field, the dog keeping a few feet in advance, and carefully examining every bush and tuft in which a bird could possibly find shelter. Generally the dog seized the quail while

GREY PLOVER.—When describing the difference between the golden and grey plover, at p. 87, as seen on wing, or in the act of alighting, I omitted mentioning the obvious character afforded by the black colour of the axillary plume beneath the wing in the latter species. When seen, this is a positive mark of distinction, the same plume in the golden plover being white.

In the 'Young Sportsman's Manual,' by Craven, published this year (1849), it is stated:—"Ireland seems the chosen land of the grey plover, which is there met with in strong flocks; but almost invariably associated with the lapwing," p. 212. Both these observations apply to the golden (*C. pluvialis*) and not to the grey plover (*C. squatarola*) properly so called. See descriptions of these species in the present volume.

I have seen in the interesting collection of native birds belonging to Mr. Watters, jun., of Dublin, a grey plover in full adult summer plumage, which was shot in the bay there, July 29, 1849. It is the third specimen in this plumage known to me as obtained on the Irish coast.

NIGHT HERON. See p. 173. Dec. 4, 1849.—I saw a specimen, received to-day in a fresh state, by Mr. Glennon, Dublin. It agreed with Jenyns' description of the young of the year, except in the eyes being orange-yellow, the feet and toes bright yellowish green, and the throat yellowish. Although the immature birds "set up" with the wings close to the body are unattractive, this bird looked exceedingly beautiful when the wings were expanded, in consequence of the central tip of each feather in all of the several rows, as they thus appeared, (excepting only the primaries and secondaries) displaying a pure white sagittate marking on a ground of pale cinnamon colour, this being the hue of the outer web in all the feathers of the wing.

sitting, and carried it to his master, who rewarded his dexterity with a slice of pudding or a sausage, which he carried in his pocket. I have seen several quails thus caught by the dog in the same field, and after each performance he was very exacting of his reward. If the bird rose, the man fired at it, so there was little chance of escape for the poor quail. The dog caught several for every one that was brought down by the gun or even fired at. It may be desirable to add that this did not occur in the breeding season."

BIRDS OF IRELAND.



ORDER, RASORES.

GALLINACEOUS BIRDS.

BIRDS OF IRELAND.

ORDER, RASORES.

(*Gallinaceous Birds.*)

THE RING-DOVE.

Wood-quest. Wood-pigeon. Cushat.

Columba Palumbus, Linn.

Is common throughout the wooded districts of the island.

MR. WATERTON is rather disposed to believe that there is an annual increase, by migration, to the number of native birds in his part of Yorkshire; Mr. Selby, who resides in Northumberland, and probably makes the remark in reference to that county, considers that there is no such increase. The great numbers that congregate in autumn, and remain together during winter in Ireland, have always been looked upon by me as our indigenous birds only, collected together in their choicest haunts, however widely they may have been separated during the breeding-season.

Belvoir Park, near Belfast, with its fine and extensive woods, is quite a preserve for these birds, where throughout the autumn

and winter they may be daily seen in the afternoon, in great numbers, not less than five hundred occasionally appearing in one flock. Mr. Selby remarks, that the ring-dove prefers to roost in fir and ash trees; but in this park the beech apparently is preferred to all others. Not only is a wood consisting of these trees their chief resort, but in mixed plantations, the beech tops may be seen dotted with ring-doves, when none appear on other *equally lofty* deciduous trees, pines, or firs—in this respect, they resemble the stock-dove (*C. Œnas*). It is interesting to see (as I have done, though rarely,) a number of these birds, before retiring to roost, descend from the highest trees to drink at the river Lagan, which bounds the demesne. On November 30, 1838, which was a very dark day, several hundreds were settled on the trees apparently for the night, so early as half-past two o'clock in the afternoon. The large flocks, rising *en masse* from their roosting-places with great noise, remind us—though their numbers are but as units to thousands—of the flights of the passenger pigeon in North America, of which we are so fully informed in the graphic narrations of Wilson and Audubon. Another circumstance has brought those descriptions to mind. On one occasion, the frequent discharge of fire-arms in the park alarmed these wary birds, and flying thence they alighted, to the number of about two hundred, on a single oak-tree in the midst of a pasture field, where they could not be approached without their perceiving the enemy from a distance. Different however from the American trees when laden with passenger pigeons, not a twig of the sturdy Irish oak broke beneath the weight of the ring-doves.

The earliest autumnal date in my journal, with reference to very large flocks roosting in Belvoir Park, is September 16, 1840. In 1839, they were noted as seen in immense flocks so late as the 25th of March, although the spring of that year was not later than ordinary.

They breed here fully as early as in the north of England, occasionally even earlier than the latter end of February—the time mentioned by Mr. Selby. Lofty trees are generally selected for

the nest, but in a locality where the species was protected I have in different instances known it to be situated within seven feet of the ground, in young fir trees. For five or six successive years lately, a pair has built in ivy growing upon a wall about twenty feet high at Castle Warren (co. Cork), the nest being placed not more than six feet distant from a window. In the summer of 1842, a large holly tree, growing close to the parlour window of Malahide Castle, was the receptacle of a nest, also situated but a few feet from a window and just over the avenue leading to the hall-door. The birds were not disturbed either by the opening or shutting of the window, or by people passing beneath the tree.* A similar instance is noticed by Sir William Jardine.† So late as the end of October, eggs have been found in the nest of this species.‡ In the early spring their cooing, with which the woods resound, and their singular flight, rising and falling suddenly through the air, render the ring-doves highly attractive. Although these birds exhibit little fear of man in the breeding season, yet they are generally very wary, and when assembled in flocks, extremely so. Their sense of hearing must be remarkably acute, as the slightest noise, even at a distance, will alarm a flock, and cause the temporary desertion of their intended roosting-place.

The large flocks alluded to, divide into foraging parties in the morning, though a few may be seen about their roosting-places at all times of the day. In severe frosts they are driven to the turnip-fields, to feed upon the green tops of the plant. Numbers may be seen together regaling on beech-mast; and they are partial to ploughed fields, on account of the seeds and other vegetable matter turned up. About Castle Warren they feed chiefly in winter on the roots of the silver weed (*Potentilla anserina*), which they find so plentifully in ploughed ground, that their crops are often filled to distention with it.|| In the north of Ireland, young people when gathering potatoes, often collect the roots of this

* Dr. C. Farran.

† Brit. Birds, vol. iii. p. 61.

‡ Mr. R. J. Montgomery.

|| Mr. Robert Warren, junr.

weed and eat them either uncooked or roasted in peat ashes. These roots have in like manner been used, both by bird and man, in Scotland;—by the latter they were formerly collected in the Western Highlands and Hebrides, in seasons of scarcity, and considered highly nutritious food.* The ring-dove must to a certain extent be useful in consuming the seeds and roots of weeds injurious to the crops, yet Mr. Waterton, who looks upon all the feathered race in the most favourable light that he considers truth to warrant, does not consider this bird of any service to man. He will doubtless, however, be pleased to read in the delightful work of Mr. St. John, entitled *Wild Sports of the Highlands*, that this gentleman has proved great good to be done by them, particularly in consuming seeds of the wild mustard and the ragweed, two of our most noxious weeds.†

A friend, whose country-seat is in the valley of the Lagan, and near to Belvoir Park, where ring-doves are so numerous, reports, that they are very destructive to young plants of the cabbage tribe, by eating their leaves, which are preferred to the tender tops of turnips. Quantities of all kinds of grain, when ripe, are said to be destroyed by them. In addition to regaling on the stooks, they are accused of flying against and laying down the standing stalks, to feed upon the pickles, as well as of alighting for the same purpose on the masses prostrated by storm or rain. Wheat is their favourite—and for it “they will fly a mile farther” than for other grain.‡ My friend has never known them to attack his

* Macgillivray, *Brit. Birds*, vol. i. p. 263.

† See an interesting account of the species in chap. xv. p. 118.

To the above it may be added, that another lover of birds, Mr. A. Hepburn, (well known by his excellent contributions to Macgillivray’s work on the subject) has, in a very interesting communication on the ring-dove,* given the species a very bad character; considering it a bane to agriculture. His own opinion, like that of Mr. Waterton, every naturalist will value; but not so that of farmers, whose evidence he brings against the bird. They, and gardeners generally, regard all birds that commit any injury to their crops simply as evil-doers, without reflecting on the real services which they perform by the destruction of hosts of the most injurious insects—the real “pests of the farm” and garden.

‡ Since the preceding was written, I have seen the following severe charge made against the ring-dove:—“When the flock settle upon the lying portion of the wheat-field, instead of breaking off the heads and carrying them away, they lay themselves

* Report of the Berwickshire Naturalist’s Club for 1848, p. 272.

cherries, but he has often seen them pluck gooseberries and currants from the bushes. In other gardens around Belfast the same bad report is given of ring-doves being destructive to these fruits. In some places they confine their attention to the currants so long as these last, and then pay their respects to the gooseberries, not waiting in either case for the ripeness of the fruit: thirty-seven large gooseberries have been taken from the crop of one bird. They are said to alight on the bushes, from which the fruit is shaken by their weight, and afterwards to pick up from the ground, what has fallen. At a very early hour in the morning they visit the gardens, and take their departure on the approach of the gardener—the protector of the fruit. Though keensighted and suspicious of danger, they do not always escape punishment. A relative living in the well-wooded district just alluded to, is so wroth against these birds that he has sacrificed many—occasionally four or five at a shot—by firing at them from his parlour and drawing-room windows, as they afforded him an opportunity when innocently feeding on beech-mast. One of these birds, which was weighed, proved to be $17\frac{1}{2}$ ounces. About Carnlough, on the coast of Antrim, where gardens are but few, ring-doves are accused of doing much injury to the bean-fields:—in spring, by picking up the beans exposed after being sown, and in autumn, by attacking them in the pods. Nearly a hundred small beans have been found in one bird. They feed much on the sea-shore in that district. I have often, too, particularly when out shooting at a very early hour of the morning, raised little parties of these birds from the gravelly or sandy beach of Holywood Warren, Belfast bay; saline matter being probably the attraction. The fondness of the tame pigeon for salt is well known, and even the turtle-dove is

down upon their breasts on the grain, and using their wings as sails, they beat out the pickles from the heads and then proceed to eat them. The consequence is, that the pickles having been thrashed out upon a matting of straw, a great proportion of them fall down through it to the ground, and are lost *even* to the wood-pigeon; in short, they do not eat one particle for twenty which they thrash from the stalk. I have repeatedly watched this process from behind the trunk of a large willow-tree growing in a thick-set hedge on the edge of a wheat-field, and seen the operation go on within a couple of yards of me.”—*Observations on “Game and the Game Laws,”* by J. BURN MURDOCH, p. 11. (1847.)

said to frequent the sea-shore in Sussex, &c., in great numbers, on account of its partiality to salt.*

A friend, who resides at Stramore House (co. Down), possesses a ring-dove, which was brought up from the nest by the person from whom he purchased it. He has many varieties of the tame pigeon, but this is more familiar, and a greater pet than any of them. When he enters the place in which they are all kept, this bird immediately flies to him, alighting on his shoulder or arm (if this be held out), and remains delighted in his company.†

Though the ring-dove is prized in the north of Ireland, the young are not regularly sought after for the table, as they are in Yorkshire, according to Mr. Waterton. This gentleman in his *Essays on Natural History*, and Mr. Macgillivray in his *British Birds*, give full and interesting accounts of the species. I have observed it in the woods about Loch Ruthven, and elsewhere in the north of Inverness-shire. About Islay House, in the island of that name, I saw, in January 1849, not less than a hundred together in a field of turnips, and was told that they are always abundant there. Those that were shot in a wilder part of the island which I visited during that month, had their crops filled with the perfect and full-sized nuts of the hazel, the predominant fruit-bearing plant of the covers. With reference to North Wales, we learn from Mr. Blackwall, that “In seasons when acorns are unusually abundant, the oak woods in the valley of the Conway are resorted to by large flocks of ring-doves * * * evidently attracted to the locality by the plentiful supply of food to be

* Knox, *Birds of Sussex*, p. 217.

† The ring-dove has a bad character in the south of Ireland, as well as in some other places. Mr. Joseph Poole, writing from the county of Wexford, remarks:—“This bird, though generally arboreal, sometimes extends its flight far into the open country, where it does more injury to the farmer than almost any other, and counterbalances it by but a small portion of good, at least so far as I have observed. Handfuls of oats may be taken out of its crop at times, and turnip tops, rape, or cabbage are all put under contribution. During hard weather I have found the flowers of cruciform plants of the genus *Brassica* in the crop of this bird, as well as seeds and leaves of corn, roots of *Potentilla anserina*, trefoil, &c. The favourite food at the end of December appears, from the examination of their crops, to consist chiefly of the roots of goosegrass, which from their richness and farinaceous qualities form an exceedingly nutritious article of food, and keep the birds in excellent condition. I have also observed it busy in gooseberry bushes during the fruit season, with the cuckoo probably at a little distance, but very differently engaged, being altogether attracted

obtained in it." The craw of a specimen on being opened "was found to contain forty-five acorns of various sizes."*

THE STOCK-DOVE, *C. Œnas*, is unknown both to Ireland and Scotland. It is said to frequent only the midland and eastern counties of England.

THE ROCK-DOVE.

Rock-pigeon.

Columba livia, Briss.

Inhabits the caverns of the rock-bound coasts on all sides of Ireland and the adjacent islets.

It is likewise to be found at inland caves and grottos, such as are not unfrequent in limestone districts. Some authors describe the sea-coast only, as frequented by the rock-dove, but I can state from personal observation, that caverns situated amid the inland solitude, or close by the perpetual din of the cataract, are resorted to, as well as those which humbly or loftily span the ocean's waves.

A few inland localities may be mentioned; as the cliffs at the Knockagh hill near Carrickfergus, and a cave at the base of Carnlough waterfall, in the county of Antrim; both, however, within about two miles of the sea. A cliff in the Mourne mountains, county of Down, bears the name of pigeon-rock, from the circumstance of these birds having once tenanted it. In the remarkable caves at Cong, county of Mayo, I have observed them, and I have read of their frequenting the celebrated cave at Mitchelstown, at the period of its discovery.

by the caterpillars, which swarm on the bushes at that time. They generally arrive at their roosting places about twenty minutes before sunset on wet, or as long after on fine afternoons. In fine weather indeed they sometimes remain abroad the whole day. Few birds are more difficult of approach than the ring-dove, either when on their roosts or while feeding, but by waiting for them at their favourite night-haunts one may easily shoot them. I have observed ring-doves in flock as early as June 12 and August 25. They sometimes frequent mown fields: in one or two instances I have seen them alight on houses. I have known their nests to be completed on March 14 and 27, and their incubating as late as October 1. I once found a ring-dove's nest built on a blackbird's of the former year. The digestive canal in this species measures exactly six feet in length."

* Ann. Nat. Hist. July 1849, p. 25.

On examining the crops of some of these birds shot in the month of June 1832, at the wild peninsula of the Horn (co. Donegal), where the species is very common, we found them filled with the seeds of rushes. When visiting the island of Achil, on the 29th of June 1834 (in company with Mr. R. Ball), we approached several rock-doves feeding on the low sandy tract near Keil, within about twenty-five paces. Having remarked to Lieut. Reynolds, R.N. (then stationed there, on the Coast Guard service), how near they permitted the approach of our party, he stated, that on the preceding day he killed twenty-one of them about the same place, and that he had procured so many as fifty in a forenoon there, and fifty-two on another day, although more than two were never obtained at a shot. They are seldom molested in this wild district, and consequently exhibit little fear of man. In the level tract alluded to, there is no ambush to conceal the sportsman, who must necessarily walk up in sight of the birds until within shooting distance. It is only at a particular season that they are seen here, when attracted by a "small pea" which is abundant, and always found in the crops of those killed. On requesting to be shown the plant, we found it to be the common bird's-foot trefoil (*Lotus corniculatus*). When walking on the summit of the fine marine cliffs about Portpatrick, in Wigtonshire, in August 1838, with Captain Fayrer, R.N., he remarked to me on some rock-doves being sprung, that he had shot many there as they came to feed on the wild "liquorice," a favourite kind of food;—this also I ascertained to be the *Lotus corniculatus*. At the marine cliffs near Ballantrae, in the adjoining county of Ayr, I have remarked these birds to be common, and have seen flocks of them alight in the fields of green or unripe corn, adjacent to the coast. It was stated that on two days in the autumn of 1843, a gentleman shot, about the marine caves here, sixteen or seventeen brace each day.

The rock-dove breeds in great numbers in numerous marine caves of the headland of Oe in Islay; many miles from which they may be seen daily feeding throughout the winter in large flocks—seventy or eighty together—particularly in the stubble fields.

Great bodies of starlings often regale near them in the same field. They are almost as tame as flocks of domesticated pigeons when these betake themselves to the stubbles, and are often within shot from the public roads. It was in winter that I remarked them thus, at which season they would prove beneficial to the farmer, though in the spring they may do some little harm unless means be taken to keep them from newly-sown fields. The crops and stomachs of three birds shot in the middle of April and sent me from that island were filled with grain. In Orkney, where these birds abound, and the ring-dove has very rarely been seen, they are considered destructive to corn-fields.* The birds brought to table in Islay in winter were delicate and very highly flavoured, much more so than the ring-dove, killed at the same time, and superior also to tame pigeons.

Of the great numbers of rock-doves which came under my notice during the month of January 1849 in Islay, *all* appeared when on the ground and on wing, of the true *wild* colour, but fully the half of those killed had the light bluish grey of the wing anterior to the transverse black bars mottled over with black. These might be looked upon as young birds were the species not stated to acquire the full colouring at the first moult, excepting a little brown that remains on the edge of the wings.† It often happens from the rock-dove being the parent of the common tame pigeon, that when the dove-cot is not far distant from the nesting-places of the wild birds in the rocks, the tame ones resort thither and pair with them. The white mottled progeny conspicuously attract attention, and when seen frequenting wild localities often cause surprise to persons unacquainted with the fact. At the Fall of Foyers, Inverness-shire, as well as at various other places, I have remarked that only some of these birds were purely bred; others being mottled with white from the admixture alluded to.

Mr. William Andrews, in a paper descriptive of a portion of the west of Kerry read before the Dublin Nat. Hist. Society in November 1841, remarked:—"Rock-pigeons breed in great numbers in the cliffs of Sybil Head, and with them I observed flocks of the mottled species. * * * These birds have not the distinctive bars on the wings; their wing-coverts and a portion of the back are strongly marked and spotted with black; the protuberances of their nostrils appear more prominent than in *Columba livia* and the tail broader and more abruptly rounded. * * * It would appear that this species [*Col. macularia*] is confined to the cliffs of Sybil Head, for upon the most diligent inquiry of those who are in the habit of observing and shooting

* *Historia Naturalis Orcadensis*, by Baikie and Heddle, Edin. 1848.

† Macgillivray, vol. iii. p. 277. A full and excellent account of the species from personal observation will be found in this work.

the rock-pigeons about the cliffs of Minard, to the east of Dingle, they had never noticed, or met with a single bird mottled, or the wing without bars." But few ornithologists will regard such birds as distinct in species from the Rock-dove. Mr. Blyth, in an English edition of Cuvier's *Animal Kingdom* published in London, with notes, in 1840, remarked on the preceding subject:—"There is a race which we suspect to be a distinct species closely allied, the wings of which are spotted somewhat as in the stock-pigeon, but more extensively, in place of the black bars. Numbers of them, all shot, are sold in the London markets. We will term it *C. macularia*." p. 231.

At the end of April 1841, I observed these birds to be numerous about the precipitous and caverned cliffs of the island of Sphacteria, forming part of the western boundary of the noble bay of Navarino. On the 29th and 30th of that month, some officers of H.M.S. Beacon set out in a boat for the purpose of entering the caves to shoot them, and returned each day with several brace. They remarked, that of the great numbers seen, all were on the western or *sea* side of the island, although as fine caverns are on the eastern or *bay* side. When we were becalmed in the Ægean Sea on the 10th of June, in H.M.S. Magpie, a likely place for these birds presented itself in a rocky islet, N.E. of Port Nausa, in the island of Paros, and a boat was lowered for the commander and myself to go in pursuit of them. A few were seen about its caves and cliffs, and a young bird of the year which was shot on wing was in full plumage, but still retained some fragments of down about the head.* On this occasion I could not but think how very different were the scene and climate from those at the Giant's Causeway, where I first became initiated in rock-dove shooting. The bird was equally common in both localities. Sir William Jardine's remark; that "we find the rock-dove frequent and most numerous towards the north"† of Great Britain, correct though it be, would seem therefore to have no reference to latitude, but simply to localities better suited to the species.

* On the 17th of May, one year, the young were remarked (by Mr. Poole) to be able to fly, on the Wexford coast.

† Brit. Birds, vol. iii. p. 67.

The mention of various places in connexion with this bird induces me to remark, though at the expense of the repetition of a few names, that nearly as the ring-dove and the rock-dove, distributed in suitable localities over the British Islands, are allied, their haunts are very different; the former being associated with the tender and the beautiful, the latter with the stern and the sublime in nature. The ring-dove is most at home in the lordly domain, rich in noble and majestic trees, the accumulated growth of centuries. The stately beech, beautiful even in winter, when with greyish-silver stem it towers upwards from its favourite sloping banks,—richly carpeted in the russet hue of its fallen leaves,—and expands into a graceful head of reddish branches, affords the species nightly shelter. The same tree, too, may have cradled the infant ring-dove; and when the bird became mature, fed it with its “mast.” The rock-dove, on the other hand, has its abode in the gloomy caverns both of land and sea. How various are the scenes—nay, countries and climates—brought vividly, with all their accompaniments, before the mind, by the sight of this handsome species! A brief indication of the nature of a very few may here be given; and in the first place, of two similar in kind, but “yet how different.” The most northern great water-fall at which this bird has come under my notice is that of Foyers, in Inverness-shire, where its habitation,

“Dim-scen through rising mists and ceaseless showers,
The hoary cavern, wide-surrounding, lowers.”

Over this fall “the evergreen pine” presides in majesty, and the surrounding scenery partakes of the fine bold character of the “land of the mountain and the flood.” From the banks above, we may, however, in a serene day, gaze across the lengthened expanse of Loch Ness as it sleeps in azure, and over the steep mountain-sides that rise from its margin richly wooded with the graceful weeping birch (the predominant species), the hazel, and other indigenous trees, until the eye rests on the somewhat distant and lofty pyramidal summit of Maelfourvonie. The most southern locality of a similar kind, in which rock-doves attracted

my attention, was amid the enchanting scenery of the Sabine hills, about the celebrated cascade of the Anio at Tivoli, where, numerous as domestic pigeons in a well-stocked dove-cot, they appeared flying in and out of the gloomy recesses of the rocks close to where the mass of waters was precipitated.* The cliffs above these falls are crowned by the ruins of the Corinthian temple of Vesta; from the neighbouring hill-sides the great aloe and the myrtle spring spontaneously, while the most antique of olive trees, many of them even grotesque from the decrepitude of age, form the chief features of the foliage.† Afar, over the dreary Campagna, Rome, once mistress of the world, appears.

In the snow-white caves adjacent to Dunluce Castle, near the Giant's Causeway, and those darkly pierced in the long range of stupendous cliffs at the Horn in Donegal, which boldly confront the Atlantic, southward to those of Sphacteria whose precipices are laved by the waters of the eastern Mediterranean, I have remarked that the rock-dove equally finds a home; as it likewise does in islets from the high and rugged promontory of Oe, in Islay, off the south-western coast of Scotland, to the "Isles of Greece."

Notes on Tame Pigeons.

The following paragraph on carrier pigeons appeared in the *Leinster Express* newspaper in Dec. 1842:—"One of these pigeons was let loose from Palmerston-house, near Chapelizod, the seat of the Earl of Donoughmore, when it accomplished the journey to Castle Bernard, which is upwards of sixty-two miles, in two hours; yet the flight was much impeded, as the day was both dark and hazy, accompanied with a strong head wind at the time. At the late fair of Ballinasloe, Thomas Bernard, Esq., took with him one of these birds, which he let go in the town at eleven o'clock A.M. with a note appended, directing dinner to be ready at Castle Bernard at the given time, as he purposed being home that day, when the bird took its flight, and the message was delivered in eleven minutes after, having travelled twenty-three miles Irish in that wonderful short space of time, or, in other words, at the rate of 125½ miles an hour. These pigeons, of which Mr. Bernard has a large flock, are so domesticated, that he can handle them as he pleases, and so very tractable are they, that whenever he calls, they attend the call promptly."

* This was in August 1826, when the falls were in their integrity. A few months afterwards an inundation occurred, which completely changed the character of the scene, and the river has since been turned into a new channel.

† Some authors have considered these the identical trees described by Pliny.

When at Epsom races on the Derby day, in 1846, I saw a number of carrier pigeons put up immediately after the race was over, and saw it announced the next day in the newspapers that one of them had flown to Windsor, thirty miles distant, in thirty minutes after being given its liberty. Others were noticed in the papers, but none of them accomplished the journey in so short a time.

It may be mentioned, on account of the period of time that elapsed on the occasion, that a tame pigeon taken from Belfast to the Falls, two miles distant, and shut up in a room for twelve months, flew back to its old quarters immediately after being liberated.

The more than ordinary attachment of one of these birds which I happened to witness, induced the following note:—*Belfast, Feb. 12, 1846.*—I was much interested to-day by seeing a fine tame pigeon accompanying two boys walking home from school—and at a good round pace—for upwards of half a mile, along the road at Parkmount. It kept close at their sides, and endeavoured to walk with them, alighting to make the attempt every twenty or thirty yards during the whole way, but as they did not slacken their speed, it could not long cope with them on foot. On being called by its name, it seemed as much delighted as a favourite dog.

An interesting note on the attachment shown by a tame pigeon to her mate, which had been shot and gibbeted in a pea-field, is related by Mr. Jesse, in his ‘Gleanings of Natural History,’ p. 112, 1st series.

THE TURTLE DOVE.

Columba turtur, Linn.

Is an occasional—almost an annual—visitant to cultivated districts in some parts of the island.

It has been obtained in the counties ranging farthest to the south-west and north-west; and has visited the island for four or five years successively, appearing occasionally at all seasons, but chiefly at the more genial:—it has bred, though very rarely.

I shall notice its occurrence, according to the years, so far as known. Mr. Templeton recorded the turtle dove as observed at Cranmore and Shanescastle, without mentioning the period. At Fisherwick Lodge, in the same county (Antrim), this bird was seen about the year 1820.

Year.	Month or Season.	No.	Locality.	Observations.
		1 2 or 3 1	Dunfanaghy, Donegal. Youghal, Cork. Shot at Castlefreke.	At various times obtained. Has been frequently observed in two localities near Carrigaline. "Fauna of Cork," (1843.)
1830	Spring.		Ballibrado, near Cahir, Tipperary.	Several remained for a few weeks, and one was shot.
1831	"		"	A few appeared in the same fields as last year.
1834	"	1	Carton, Kildare.	Said, for two or three successive summers of late years, to have visited Simpson's nursery grounds, near Dublin.
"	Aug.	1	Dunmore, Waterford.	
"	Sep. 20.	1	Tralee, Kerry.	Its crop was filled with wheat.
"		1	Co. Wexford.	
1835-36	Summer.		Malahide, Dublin.	Some were shot in a district in which one was observed two or three years previously feeding in a field of vetches, but was too wary to admit of the approach of my informant within gunshot.
1836	"	1	Lord Roden's demesne, Dundalk, Louth.	
"	"	1	Woodstown, Waterford.	
1837	June.	1	"	
"	"	1	Donnybrook, Dublin.	
"	Autumn.	1	Montalto, Down.	
"	Oct., (1st week.)	1		Seen at road-side between Auchnacloy and Armagh.
1841?	Autumn.	1	Tollymore Park, Down.	Killed by a stone when perched on a stook of wheat.
1842	Summer.			I have been credibly informed that a pair bred in a plantation near Downpatrick, where they remained until a late period, one of them having been killed on the 12th of November.
1845	July(end of)	1	Bantry, Cork.	
"	Oct.(late in)	1	Downpatrick, Down.	
1847-48	July.			Observed in turnip-fields at Castle Warren, near Carrigaline, Cork.
1848	Summer.	1	Bray, Wicklow.	Seen for several days.

Mr. R. Chute, writing to me in Feb. 1846, remarked that he knew of five turtle doves having been killed in the county of Kerry. He had not seen any for the preceding two or three years, but had shot one late in the month of November, as it was feeding in company with a flock of sparrows in the village of Blennerville. A second was obtained about Christmas in a garden at Dingle. The others occurred in summer; a pair bred at Derraquin in that county. Turtle doves (as remarked by Mr. Poole in 1847) seem nearly entitled to be termed regular summer migrants to the south of the county of Wexford. This observation is interesting, as from the circumstance of the species being most common in the south-eastern counties of England, where it appears every summer, we should expect that in Ireland, Wexford would be more frequently visited than the more western parts.

At the period of publication of Mr. Macgillivray's first volume of *British Birds*, in 1839, he was not aware of the occurrence of the turtle dove in Scotland; but in Sir William Jardine's third volume on the same subject, which appeared in 1842, instances are mentioned of single individuals having been obtained in Aberdeen, Perth, and Dumfries-shires. We are subsequently informed of its being "sometimes, but only rarely met with as far north as Moray-shire,"* and that it has once been shot in Sanday, one of the Orkney Islands.†

During a tour through Holland and Switzerland, in the summer of 1826, the turtle dove often came under my notice, and in the former country was very tame. When I was proceeding in H.M.S. *Beacon* from Malta to the Morea in April 1841, one of these birds flew on board on the 24th, and another on the 25th;—they each rested for a short time on the rigging, and then continued their flight northwards. On the 26th, four came from the south, two of them singly, the others in company; one only alighted on the ship: it was caught in the evening when asleep. Throughout the 27th many were observed coming from

* St. John's Tour in Sutherland vol. ii. 159.

† Hist. Nat. Orcadensis, p. 55. (1848).

the south, and generally singly, never more than two together; very few alighted. On the 24th the vessel was, at sunset, 90 miles E. of Sicily, Syracuse being the nearest land: on the 27th, 45 miles from Zante, and 60 west of the Morea. On the 29th of April one was seen near Navarino; and another on the 6th of May in the island of Syra:—at the end of this month, I observed numbers among the light and tender foliage in the spacious gardens of the old seraglio at Constantinople. I had remarked the Egyptian turtle dove (*Col. ægyptiaca*, Lath.) a few days before, amid the sombre but magnificent cypresses, which (attaining apparently to 80 feet) rival the Lombardy poplar in altitude, and tower—a forest of evergreen spires—above the very extensive Turkish and Armenian cemeteries of Smyrna.

THE PASSENGER PIGEON (*Columba migratoria*) is recorded by Dr. Fleming as having been taken in Scotland, and is said to have been subsequently noticed in the same country. But as the species is occasionally brought to the British Islands in vessels and kept by pigeon-fanciers, it seems to me that the individuals alluded to may probably have escaped from confinement. There is no doubt, however, that this species could better cross the Atlantic than some others which are considered to have done so. The passenger pigeon is also said to have been met with in Norway and Russia.*

THE COLLARED OR AFRICAN TURTLE DOVE, *Columba risoria*, Linn. (a bird of a buffish-brown, or deep “stone colour,” with a narrow black collar encircling the hinder part of the neck), is much kept by bird-fanciers in this country, and often called simply *turtle dove*. I remarked this species in 1826 to be domesticated like our common pigeon at the Hague in Holland, where it was seen flying about the city. I have likewise observed it in some of the towns of Italy.

* Temminck, Man d’Ornit. de l’Eur. part iv. p. 311.

THE PHEASANT.*

Phasianus Colchicus, Linn.

Is common in various wooded parts of the island, where it has been preserved and protected.

THIS species being neither an indigenous one, nor a visitant to Ireland in a wild state, but having certainly been introduced, is therefore dis-entitled to receive the honours of ordinary type. The period of its introduction is unknown to me; but in the year 1589 it was remarked to be common.† Fynes Moryson, who was in Ireland from 1599 till 1603, observes that there are “such plenty of pheasants, as I have known sixty served up at one feast, and abound much more with rails, but partridges are somewhat scarce.” vol. ii. p. 368. Smith seems to have imagined that pheasants were indigenous to the island, as in his History of Cork, it is remarked—“They are now [1749] indeed very rare, most of our woods being cut down.”

In the counties of Antrim and Down, the ring-necked variety—considered to have originally proceeded from a cross-breed between the common and true ring-necked pheasant (*Phasianus torquatus*, Temm.)—is not uncommon. Individuals much pied with white are also not unfrequently met with. In the middle of February 1845, an extremely beautiful pied pheasant, with much white in its plumage, bred in the woods at Glenarm Park, was found at the edge of a plantation there in a weak state, by Edmund Mc Donnell, Esq. Soon after being taken to the house it died, in consequence (as proved by dissection) of having partaken of poisoned food, of which some had been laid for rats. This bird was in the highest condition as to flesh and plumage; it was kindly presented to the Belfast Museum by the gentleman just named. By the same considerate donor, a more remarkable pheasant was presented in Jan. 1849; it being not only pied with white, but a female which had partially assumed the plumage of the male. The tail was the most interesting portion; it having attained the full length of that of the male, while the markings on the two longest feathers, and the three next to them on one side (all that

* So named from a belief that it was brought from the banks of the Phasis, a river of ancient Colchis.

† See note given under Quail.

remained dark in hue) were those of the female; the whole of the others, from base to point, including the shafts, were of the purest white.

Female pheasants seem more prone to assume the plumage of the male in a wild state (if such it may be termed), than the females of any other bird. Several,—in various states of change, from its commencement to its completion,—which were shot in covers in the north of Ireland, have come under my notice. Had the garb of the weaker sex been retained, they might have escaped, as the sportsman will not direct his deadly aim at a *hen* pheasant. Although these birds approximated in every part of their plumage to that of the male, exhibited the bare scarlet skin around the eye, and the tail one half longer than it originally was, yet the colours were comparatively dull in hue, wanting in the depth of tone, and in the gloss and splendour of the veritable adult male; they can, therefore, be detected at a glance by the ornithologist. All such birds that have been dissected, exhibited the generative organs diseased, and were incapable of producing eggs. The few that I have myself had the opportunity of examining bore out this view. In Yarrell's *British Birds* (vol. ii. p. 319, 2nd edit.) the subject is alluded to and illustrated.

In January 1849, I was informed by Peter Maekenzie, a most intelligent gamekeeper at Ardimersy, Islay, that at a place in East Lothian, where he had charge of the game some years ago, one or two female pheasants were remarked every year to assume the plumage of the male. He was in the habit of feeding the pheasants close to the house, and observed that the females in male plumage annoyed the ordinary hen-pheasants very much by driving them from the food. This was so constantly practised, that he and the other keeper eventually shot all these mock males. From what they witnessed of their disturbing the ordinary hens, it was imagined that they would persecute them when they had nests. A domestic hen belonging to the gamekeeper just named, after being in his possession for two or three years (her age was unknown) commenced changing to the plumage of the cock, which was soon fully assumed, even as to tail, very large comb spurs, two inches long, &c. Her body, too—he and the person who fed her agree in stating—became apparently one half larger in size.

The aversion of pheasants to take wing when near their home must have been observed. I have been amused to see them carry this so far

that when cantered up to, or charged on horseback, they would run across a considerable stretch of field to the preserve rather than take to flight. The effect of thunder in prompting these birds to crow has been noticed by some writers. I particularly remarked it on the 7th April, 1833, when walking along the banks of the river Lagan. Between four and five o'clock in the afternoon there were several peals of thunder, at the immediate commencement of each of which many pheasants in Belvoir Park loudly crowed, though quite silent that day at other times. The capture of pheasants by means of the fumes of sulphur is not believed in by Mr. Waterton. Although never present myself at any such poaching delinquency, I have no doubt, from what has been stated to me, that they are so taken, and that the vile practice is resorted to on the western, as well as on the eastern side of the Irish sea. Full particulars of the manner in which the birds are obtained have indeed been communicated to me, but I shall not give currency to them.

I have been kindly supplied by Mr. James R. Garrett, a most accurate observer, with the following comments :—"Mr. Yarrell has stated (*Brit. Birds*, vol. ii. p. 315, 2nd ed.) that 'pheasants do not pair, and except during the spring, the males and females do not even associate.' And Mr. Macgillivray says (*Brit. Birds*, vol. i. p. 124,) 'The female after depositing her eggs among the long grass, or under the shade of a bush, having merely scraped a slight hollow which she has scantily lined with leaves, is deserted by the male, and performs the task of bringing forth, and leading about, the young without his assistance.'

"These observations are correct with reference to the usual habits of the pheasant whilst in a semi-domesticated state, but I have on several occasions known the cock to accompany the hen and her young brood, 'leading them about' until the latter were able to take care of themselves.

"In these instances the parent birds had (as the species is prone to do) strayed beyond their 'preserves' at the breeding season; and the circumstance of their having paired while thus enjoying full liberty, tends to confirm the view expressed by Mr. Macgillivray (*Brit. Birds*, vol. i. p. 273), where, speaking of the rock-dove, he observes,—'It is monogamous, as I apprehend all wild birds, even the Gallinaceous, are.'

“ The disposition of pheasants to wander in spring, and nidify at some distance from their winter cover, is well known ; but I have not seen any allusion made to their habit of frequenting potato fields in summer and autumn. I have, however, often observed them there, and believe that they are fond of raw potatoes. I have occasionally remarked that during the absence of the pheasant from its nest, the eggs (sometimes thirteen in number) were partially covered with hay, which I believed to have been placed there by the bird itself.”

Upon looking to notes on the food observed in opening ten pheasants, shot at various times and places during five months—from November until April inclusive—I find that the stones of haws or fruit of the white-thorn appeared in seven of them ; in addition to these were grain, small seeds, and peas : one exhibited a few roots of plants and twigs of trees : in another were thirty-seven full-grown acorns, some of which were large, others small ; the gizzard showed, in addition, a mass of them : a third was nearly filled with grass : one only contained any insects—all presented numerous fragments of stone. A pheasant which frequented our own garden daily for some time in summer was accused of feeding on black currants ; the tops (and as a friend assures me the bulbs also) of turnips are sometimes eaten ; and a fine male bird was in the habit of visiting a stable-yard in the vicinity of Belfast very early in the morning for the purpose of feeding there. An intelligent taxidermist once brought a pheasant's stomach to me on the 6th of April, for the purpose of showing that it was chiefly filled with the yellow flowers of the Pilewort Crowfoot (*Ranunculus ficaria*), which he had always found in birds killed in spring, or during the period of the flowering of that plant,—one of the very earliest of our indigenous species in putting forth its petals. The same stomach contained numerous blades of grass, which in no other instance had been met with in the pheasant by my informant. He knows the tuberous roots of the silver weed (*Potentilla anserina*) to be much eaten by this bird, when they are turned up to the surface in fields under cultivation.

While spending the month of January 1849, at the sporting quarters of Ardmersy Cottage, island of Islay, where pheasants are abundant, and attain a very large size, the ring-necked variety, too, being common, I observed that these birds in the outer or wilder covers feed, during mild as well as severe weather, almost wholly on hazel-nuts. In the first bird that was remarked to contain them, they were reckoned and

found to be twenty-four in number, all of full size and perfect,—in addition, were many large insect larvæ. Either oats or Indian corn being thrown out every morning before the windows of the cottage for pheasants, I had an opportunity of observing their great preference of the former to the latter. After several grains of the Indian corn were picked up hastily, they seemed to stick in the bird's throat and were with much difficulty swallowed. The neck was moved in various directions to accomplish this object, and the eyes were often closed in the effort; but immediately afterwards, the birds recommenced eating at the grain which had given them such trouble. Yet this grain is small compared with full-sized hazel-nuts. I remarked a pheasant one day in Islay taking the sparrow's place, by picking at horse-dung on the road for undigested oats. The woods here, during the month of January, resounded about sunset with the loud crowing of the cock pheasants then betaking themselves to their nightly roosts.

It is gratifying to find writers of such enlarged experience and accurate observation as Mr. St. John and Mr. Knox, agreeing upon the subject of the good done by the pheasant to the farm, as more than counterbalancing any injury it may commit. The latter author, in his very agreeably written volume entitled "*Ornithological Rambles in Sussex*," enters fully and in an interesting manner into the subject, summing up with the verdict that this bird, owing to the great number of injurious insects it destroys, "is rather the friend than the foe of the agriculturist," p. 165. The former author, in his "*Tour in Sutherland*," vol. ii. p. 217, speaks still more decisively with respect to the pheasant, which he considers in a great degree insectivorous. This whole matter is most fully and justly argued in a pamphlet entitled, "*Observations on Game and the Game Laws*"* (p. 14–21), in which the author remarks that—"Pheasants [in reasonable numbers] have in truth been a profitable stock on the ground. They have been subsisting upon weeds and insects injurious to cultivation, and upon other substances not useful to man; and in return they now furnish man with an article of wholesome and delicate food." p. 20.

* By J. Burn Murdoch, Esq. (1847).

GOLDEN PHEASANT, *Phasianus pictus*, Linn.

My friend Wm. Sinclair, Esq., having been particularly successful in rearing these birds at the Falls near Belfast, I have thought that an account of his mode of doing so would be desirable. He has kindly contributed the following :—

“Golden pheasants are very easily reared in confinement, and are quite as hardy as any of the other pheasants, or as any of our domestic fowls; indeed I question if any of them are sooner able to provide a subsistence for themselves, or to live independent of the parent bird. In the several years experience I have had in the rearing of these birds, I have considered them past all danger when they arrived at the age of three or four weeks; in fact, at that age, those which I brought up in the garden began to leave the bantam hen which hatched them, and take into the gooseberry bushes to perch at night; and very soon after, into the apple trees. I always observed that they roosted at the extremity of the branches, where they were quite safe from the attacks of cats or other vermin. This habit, together with their very early disposition to roost at night, leads me to infer that their introduction into this country as a game bird would not be difficult; and that in our large demesnes, where protected from shooters, they would become very numerous. But I should imagine that they would not answer where the common pheasants were already introduced, as they are shy timid birds, and would be easily driven off by the other species. The individuals before referred to, which were reared in the garden, consisted of a family of six: they always remained in the garden where they were regularly fed, except at the commencement of winter, when they ceased roosting in the apple trees, took to a belt of Scotch firs which bounded the garden on one side, and roosted in them all the winter and following spring. I have seen them sitting in the trees when their branches were laden with snow, but they did not seem to suffer in the slightest degree from the severity of winter. About the month of February they first began to wander from the garden for short distances; and as the spring advanced, finally disappeared, and I never could hear of their being met with afterwards.

“In rearing the young, I found that the very best food for them, and of which they were most fond, was the larvæ of the blue-bottle fly,*

* Flesh-fly, *Musca carnaria*, Linn.? W. T.

with a quantity of which I always was prepared prior to the young being hatched. I took care to have a constant supply during the season, by hanging a cow's liver over a barrel, in the bottom of which was some bran or saw dust, into which the maggots dropped. A fresh liver was hung up about once a week. In addition to these larvæ, the young were supplied with potatoes, alum curd, groats, and Indian corn meal, when to be had ; this last I found they were very fond of, and it seemed to agree with them particularly well. It was mixed into the form of soft dough with a little water, which was all that was required. They were also constantly supplied with green food, such as lettuce, when they were in the aviary. But the best way is to have a coop, railed in front, into which they are put with the hen twenty-four hours after they are hatched. This coop should be placed upon a gravel walk as near to the windows of the house as possible, so that they may always be within observation ; a small verdure garden is the best possible locality, as the young have plenty of range, with shelter under the bushes from both sun and rain. In the instance which I have already alluded to, the hen was allowed to range about six feet from the coop, by means of a small cord attached to a leather strap round one of her legs and the other end tied to the coop : the young pheasants never wandered far from the hen, and always came into the coop to remain with her at night. In front of each coop a small frame was put down, boxed round on three sides, without a bottom, and railed at top ; the open side was put close to the coop, and the young birds could run through the rails of the coop into the enclosed space, and were safe from the night attacks of cats, rats, &c. This frame was always kept before the coops for the first few days after the young were hatched, and until they became acquainted with the call of the hen. When I first began to rear young pheasants I could not at all account for their seemingly foolish manner for the first two or three days after being hatched ; they would run gaping about without appearing to notice the hen or her calls to them to come for food. The reason of this I afterwards believed to have been owing to their ignorance of the language of their foster-mother, which it took some time for them to understand : during this process it is necessary to keep them confined within the frame before their coops, as were they to wander a few yards from the hen they would not heed her call, and would inevitably perish. When three or four weeks old, it is necessary, if they are to be kept

in the aviary, to pinion them, which is done by cutting off rather more than the first joint of the wing, having previously by means of a needle and thread inserted close to the small wing-bone, and brought round the large one, just within the skin, taken up the main blood-vessels; the piece of the wing is then chopped off on a block: there is no loss of blood, and I never could observe that the birds seemed to suffer in the slightest degree afterwards, although the operation I dare say was painful enough. My reason for taking off rather more than the first joint of the wing was, because I found that if only the first joint was taken off, the birds were always able, when grown up, to get out of the aviary, which was about twelve feet high; and I found it thus requisite to take off so much as to render them incapable of any attempt at flying, but left enough remaining to enable them to reach their roosting place at night. I furnished them with a kind of ladder, by nailing cross pieces of wood on a long piece about three inches wide, and which they very soon learned to walk up and down with facility. One aviary in which I kept some, had a back wall to it covered with old ivy, and they preferred roosting in this; indeed I always found, that although during a wet day those which were at liberty took shelter under a roof, yet at night they would not do so, but would instead roost in the open air. The females will lay about twenty-five eggs each in the aviary. I always provided them with baskets to lay in, which they only sometimes made use of: they take twenty-four days to hatch. The young cocks do not attain their full plumage until after the moult of the second summer; they drop their chicken feathers when about three months old; their plumage is then something like the hen's, but sufficiently bright in some parts as easily to distinguish them from the young females; in general there are more cocks than hens. If the cock birds are placed in a portion of the aviary apart from hens, any number may be kept together. I have had so many as twelve males in full plumage together, and when during the summer (and indeed at all times) these beautiful birds were going through the very curious and fanciful attitudes and manœuvres peculiar to them, it was one of the most brilliant sights to be observed in nature. The flashing of their various golden, crimson, blue, and purple plumes in different lights was absolutely dazzling to the eye, and at these times they contrive to display all the most beautiful parts of their plumage to the utmost advantage; the golden crest is raised; the

splendid orange and purple-tipped collar is spread out to its full extent, while the scarlet tail coverts are shown in all their beauty. During the whole time, the birds are leaping and dancing round each other, and uttering occasionally their peculiar shrill cry."

Any fact respecting the *age* which the golden pheasant or silver pheasant (*Phasianus nycthemerus*) will attain in captivity seems worthy of notice. I have known a fine male silver pheasant to live twenty-one or twenty-two years. Golden pheasants that I happened to learn the age of, did not exceed half that period, though which species can really be termed the longer lived, I am unable to state. Such of the latter as came under my knowledge died almost instantaneously, and when in the highest condition as to flesh and plumage.

I saw at Glenarm Park some years ago, a brood, the one half of which was composed of the full-bred common, and the other half of the full-bred silver pheasant. The eggs of the two species were placed under and incubated by a "barn-door" hen, under whose maternity they had thriven very well. The young of both species escaped from the eggs on the same day.

The *native country* both of the golden and silver pheasant is China.

The PEA-FOWL (*Pavo cristatus*) is a native of India, where it still exists in a wild state. A pair of these birds kept by us for some time paid due respect to the hall door by eating there only of bread or biscuit (moistened), though at the back door they partook freely of potatoes. Mr. Poole observes:—"A peacock which belonged to the neighbour of an acquaintance of mine (on whose house the bird roosted) had both his eyes picked out in one of his quarrels. Although total blindness was the result, it did not cause the bird to forsake his perch on the top of the house: he still succeeded in getting up to the ridge. The reasoning power displayed in his manœuvres is worthy of notice. In order to be sure of reaching the eave in his flight from the ground, he regularly measured his distance from the foot of the wall by carefully stepping it, when he knew that by flying up at his accustomed angle he could reach the eave without any danger of striking against the wall."

The GUINEA-FOWL or PINTADO* (*Numida meleagris*), was originally brought from Africa (it inhabited Guinea). The late George

* The Cape Petrel is also called *Pintado bird*.

Mathews, Esq., of Spring Vale (Down), informed me, that about fifty of these birds kept there, flew about in company every evening before roosting, and then settled for the night on old ash trees, which were the highest about the place. On a field of barley being reaped, a nest of these birds was discovered, containing between two and three hundred eggs.

Hollywood House, Sept. 1847. It is amusing to see a guinea hen and common hen here, jointly taking care of a few young guinea fowl brought out by the former. The hen had not lost any chickens lately, but a few months ago performed the maternal duty to a brood of young ducks, which she incubated. The mother proper and foster mother are the best of friends in taking care of the brood, but the latter is much the more attentive to them, by pointing out food, &c. She also protects the young birds under her wings during the night, while their own mother perches on high.

The TURKEY (*Meleagris gallopavo*) was introduced from North America, where it is still found in a wild state.

COMMON FOWL. *Gallus domesticus*. Mr. Poole remarks:—"It is well known that magpies are very destructive neighbours to the fowl yard. Of this a game cock belonging to a neighbour seemed to be aware, as during one season he killed four of these birds, which incautiously ventured within the fowl house where he roosted."

Though perhaps not a rare instance in the case of this species, it may be worth noticing, that a fine cock kept in our own yard, on more than one occasion assaulted an old cook who nowise meddled with him, though she did sometimes lay hold of some of the members of his seraglio. She was once indisposed for a few days after his attack, on which occasion, according to her own version, he had struck her "severely with his spurs between the ribs."

In April 1842, the following paragraph appeared in a Dublin newspaper:—"On Sunday se'nnight, a child named Martha Collins, living at Harold's-cross, was sent by her mother to a livery-stable yard in the neighbourhood, kept by a Mr. Smith. On entering the yard, a cock flew at the child, and struck her three or four times in the face and other parts of the head, cutting her with each blow. A woman, also named Collins, resident in the yard, hearing the screams of the little sufferer, ran to her assistance and rescued her. On the Tuesday following, it was considered necessary to have medical aid, and the

child was shown to Dr. Monks, who at once pronounced the case fatal. The child expired the next day. An inquest was held on the body, and a verdict according to the above-mentioned circumstance returned.*”

Aug. 24, 1846. Mr. Joseph Mc Kelvey states, that a hen of his at Milltown, Falls, having “sat” beyond the ordinary time on a number of eggs, he yesterday examined them, and finding them addled, commenced breaking the eggs in the presence of the hen, who shrieked at beholding the operation, and hurried from the place. When passing the nest, about an hour afterwards, Mr. Mc Kelvey observed the hen on it, and, going to the spot, found her quite dead, without any appearance of external injury: he concluded she had died of grief. From my knowledge of my informant, I can vouch for the truthfulness of what is here related; although the accuracy of the conclusion as to the cause of death may be questionable.

Fowls and eggs form such great items of exportation from this country, that the following note is given to show the important difference between a good and a bad breed.

In August 1845, William Ogilby, Esq., of London, informed me that he last year sent a pair of the grey *Dorking fowls* to a friend in the county of Londonderry. Within five months the hen laid seven dozen of eggs—laying two days in succession, ceasing the third day, and so on during the period. From these, five dozen of young, with the aid of other hens as mothers, (the Dorking hens are themselves excellent parents) were reared. All the eggs were not “set,” some having been eaten. They are very large, sometimes weighing $3\frac{1}{2}$ ounces. Cocks weigh from 10 to 12 lbs.; hens, when fat, 8 lbs.; chickens four or five months old, 4 or 5 lbs.; one cock of this age was 6 lbs. Mr. Ogilby has spread these fowls as much as possible over the neighbourhood, and they are greatly valued by the peasantry, as for their eggs they receive fifty per cent. more than for ordinary eggs—the one kind sells for 4*d.* per dozen, the other for 6*d.* My friend is not aware whether the

* The Bishop of Norwich, in his ‘Familiar History of Birds,’ mentions an ungallant and furious assault of a cock-pheasant upon a young lady when quietly walking on the highway, but who, nevertheless, seized her assailant and carried him home. A mousing hen being alluded to in this work (3rd ed. vol. ii. p. 97,) reminds me that in my young days there was a hen of our own stock which took an especial delight in mouse-hunting: I have often seen her carrying the victims about as if in triumph.

Dorking fowls eat more than others, but as they are considerably larger, it is reasonable to believe that they do. They are very quiet and not given to roaming, which will much curtail the quantity of food necessary to generate animal heat and induce regular laying.

July 18, 1849.—I saw at Mertoun, a hen with 28 young guinea-fowl following her, consisting of three broods brought out at different times, the oldest by herself, and being about four times the size of the youngest. The other broods were incubated under Malay hens, each of which killed two or three chicks by unconsciously trampling them to death with her large feet. These broods were consequently given in charge to the other hen—a large bird of the ordinary kind by whom they were at once gladly received, and treated with the same parental care as those brought out by herself. With good management she is able to gather the whole 28 under her wings.

The love of the hen for maternity is, as well known, sometimes carried to an extraordinary—it might almost be said unnatural—extent. At the residence of a clergyman of my acquaintance, near Kirkcubbin, county of Down, in May 1849, a hen had her nest and eggs in the corner of an outhouse, close to where a cat had brought forth three kittens. The eggs being taken away, the hen, though not having commenced incubation, left her own nest on the evening of their removal, and took charge of the kittens. During the few following days she laid some eggs among her adopted young. These eggs were likewise removed; but she continued, nevertheless, to cover the kittens during the night, and to lead them about by day, giving utterance to the usual clucking note, ruffling her plumage, and in every way acting towards them as if they were her own progeny. The kittens, too, treated her as a parent, crouching under her for warmth, and one or more of them occasionally climbing on her back as chickens would do. The parent cat, good humouredly from the first, resigned her charge to the feathered nurse-tender, and lived on the most friendly terms with her during the period—about a month—in which she assisted her in the discharge of her maternal duties.

The domestic fowl, and indeed all the species of *Gallus*, are natives of the more southern and eastern parts of Asia, or the neighbouring islands, where they are still found in a wild state.

THE CAPERCAILLIE, OR WOOD GROUSE.

Cock of the Wood.

Tetrao urogallus, Linn.

Has unfortunately long since been extinct.

THAT so noble a bird—the chief of the European grouse—and aboriginal inhabitant of our native forests should have become so, is much to be regretted; but by the felling of the woods its doom was sealed. Giraldus, in his ‘*Topographia Hiberniæ*’ states, that this species (called by him *Pavo sylvestris*) was more common in Ireland than the red grouse, about the twelfth century. When the island was covered with native woods one can imagine this to have been the case, but even if less abundant, the nature of its haunts would cause it to be more frequently met with than the red grouse, and consequently lead to the belief that it was more common. Willoughby (1678) observes, “This bird is found on high mountains beyond seas, and as we are told in Ireland (where they call it Cock of the Wood), but nowhere in England.” He thus concludes his description: “The flesh of this bird is of a delicate taste and wholesom nourishment, so that being so stately a bird, and withal so rare, it seems to be born only for princes’ and great men’s tables”! O’Flaherty, in his “West or H-Iar Connaught,” written in 1684, remarked:—“I omit other ordinary fowl and birds, as bernacles, wild geese, swans, *cocks of the wood*, woodcocks, choughs [jackdaws?], rooks, Cornish choughs with red legs and bills, &c.” p. 13. The Irish statutes 11 Anne, ch. 7, recite, “that the species of cocks of the wood (a fowl peculiar to this kingdom) is in danger of being lost,” and prohibit the shooting of them “for seven years.” Smith, in his ‘History of Cork’ (1749), observes, that “it is now found rarely in Ireland, since our woods have been destroyed.” Ruttý, in his ‘Natural History of Dublin’ (1772), mentions that “one was seen in the county of Leitrim about the year 1710, but they have entirely disappeared of late, by reason of the destruction of our woods.” Vol. i. p. 302.—Pennant, in his ‘British Zoology’ (1776), states that “about the year 1760 a few were to be found about Thomastown, county of Tipperary.” The 27th Geo. III. “prohibits killing moor game, heath game, grouse, pheasant, partridge, quail, land rail, and *wild turkey*, between

the 10th of January and 1st of September.*" Whether or not the wood grouse is meant by wild turkey may perhaps be considered uncertain; but in the following instance there is no uncertainty. According to the Rev. Mr. Dubourdieu's 'Survey of the County of Antrim,' published in 1812, "wild turkeys are now nearly extinct, though once in such numbers at the former place [Portmore]; the breed, *the true copper colour, with red legs*"!

In an article which appeared in the Sporting Review for October 1847, p. 254, on 'Woodcock and Snipe Shooting," by L. Lloyd, Esq., dated "Sweden, December 1846;" the writer remarked in reference to the woods of Glengariff, the property of Lord Bantry:—"It is to be hoped that the capercaillie with which I some years ago supplied his lordship have succeeded."

From Mr. G. Jackson, gamekeeper at Glengariff, I learned, in April 1849, respecting the birds thus alluded to, that "Lord Bantry received three brace of capercaillie from Mr. Lloyd, about seven years ago. They arrived safely, and were to all appearance doing well for the first six months, when one of them was observed to mope about and appear quite solitary. In a few days, it died. From that time to about nine months they all died in the same way, except one hen. She was removed into a pheasantry and laid two eggs, but became ill in the same manner as the others and died. They were kept in a large aviary and had ample space. Mr. Lloyd's instructions respecting them were most scrupulously attended to. They were quite domesticated, and in perfect health, as far as I could judge from their condition, plumage, &c. until the time they were first taken sick. I do not know of any others having been introduced to Ireland." A copy of the "Directions for the Management of the Capercaillie," addressed by L. Lloyd, Esq., to Lord Bantry, accompanied this note. They are as follows:—

"Suffer no one, for a time, but the keeper and yourself, to go near the birds.

"Always approach them steadily, and with caution, so as never to cause sudden alarm.

"Be as quiet as possible when near them, and retire slowly.

"The site where they are kept should be dry and airy; and a considerable portion of the space allotted to them should be protected from falling weather.

"They must be constantly supplied with water, particularly in summer.

"They should be well provided with coarse sand and grit (small gravel)—this is

* For the extracts from the Irish Statutes I am indebted to Francis Whitla, Esq.

of great importance—they should have also a heap of fine sand to dust themselves in.

“They will eat nearly all kinds of grain, particularly wheat, barley, and white peas; of the last they are particularly fond.

“They ought to be well provided with boughs of the Scotch fir. They eat heather. Give them occasionally turf; with green food—as berries, cabbage leaves, &c.,—but should their mutings appear washy, desist altogether for a time.

“Do not over-feed them: fifty birds die from repletion, for one from starvation.

“If any bird appears to mope or become sickly, remove him directly, more particularly if in a confined place; the healthy birds will otherwise molest him, and prevent his feeding, &c. &c.”

In Scotland, the last native specimen of the wood grouse was stated, in 1842, “to have been killed in the neighbourhood of Inverness more than sixty years since.”* From that period not a single individual was met with, even in the most remote and least frequented of the Highland forests. Of late years, however, many of the Scottish hills having been wisely clad, by their proprietors, with extensive plantations, the species has been introduced from the north of Europe with success, and about Taymouth, more particularly, has been increasing as in the olden time. A very fine male bird (shot there by Prince Albert in the autumn of 1843) which came under my notice in Edinburgh, was as large and fine as any of the numerous specimens from Sweden and Norway, which for many years past I have seen in the shops of the London game dealers. At Lord Orkney’s aviary, in connexion with the gamekeeper’s house, Glenapp, Ayrshire, I saw a number of these birds in September 1843. A brood of nine was reared there that season, and were all fine healthy birds, almost of adult size. The average number of eggs laid by several hens of this species at Taplow Court, his lordship’s seat in Buckinghamshire, was sixteen; and many young birds were brought out there, but they generally fell victims to a particular disease, the nature of which I do not remember.

It is interesting to have the opportunity, as visitors to the Zoological Gardens, Regent’s Park, London, now have, of witnessing the attitudes which are assumed by the male capercaillie, when he wishes to display himself to the best advantage, and attract the favour of the female. “His neck (to use Mr. Lloyd’s words) is stretched out, his tail raised and spread like a fan, his wings droop, his feathers are

* Jardine, Brit. Birds, vol. iii. p. 79.

ruffled up, and, in short, he much resembles an angry turkey cock." Some young capercaillies have been reared in these gardens.

M. Alex. P. Prevost of Geneva informed me, in Aug. 1846, that this species is still occasionally, though very rarely, obtained in that quarter. One had been killed in the Jura mountains during the preceding season.

THE BLACK GROUSE.

Black Game.

Tetrao Tetrix, Linn.

Is not now found in Ireland,

AND that it ever was so, is at least doubtful. I have not met with any satisfactory evidence of this very fine bird having been indigenous. Smith, in his 'History of Waterford' (1745), remarks—"It is uncertain if we have not the *Urogallus minor*, Raii, viz. the heath-cock or grouse of Willoughby, which I take to be the black game of England, and also an inhabitant of the mountains," (p. 336). The same author, in his "History of Cork," says of "The black grouse (*Tetrao seu Urogallus minor*):—This species is frequent, and needs no particular description. It inhabits mountains, and is rarely seen in lower heath grounds. The cock is almost black, but the female is coloured like a woodcock or partridge." Were this description taken from native birds it would be decisive as to the species; but it is, instead, borrowed from the work of Willoughby. Mr. Templeton states his having heard, from good authority, that "black game is mentioned in some of the old leases of the county of Down;" but even so, proof that the *Tetrao Tetrix* was the bird so alluded to, and did exist there, would still be required. Pennant states, in his 'British Zoology' (1776), that "some have been shot in Ireland, in the county of Sligo, where the breed was formerly introduced out of Scotland, but I believe that at present the species is extirpated."

That many portions of Ireland, when it abounded in natural wood, were well suited for the abode of the black grouse, does not, I conceive, admit of any doubt; * but then we know not whether Great

* This remark about wood, in connexion with black game, was founded on personal observation in parts of Ayrshire, Perthshire, and Inverness-shire, where the species

Britain may not have been geographically within its latitude, the extreme western range of the species. I have not seen any record of its being met with west of Great Britain in any latitude. Since the period mentioned by Pennant this species has been introduced into different parts of Ireland, and being turned out lived occasionally for some years; but I am not aware of its having bred in any instance. There are in the county of Antrim, just opposite to the favoured haunts of this bird in Scotland, localities which seem in every natural feature well-suited to the black grouse. In two of these places, "Claggan," the property of Viscount O'Neil, and Glenarm deer-park, belonging to Edmund Mc Donnell, Esq., this bird has been introduced: with what success, the following letters from the respective game-keepers, both intelligent men, and the best "authorities" on the subject, will explain. C. Redmond, gamekeeper at Claggan, informed me, on January 1, 1841, as follows:—

"Twelve years ago (two years previous to my coming here) there were four brace of black game turned out, a cock and hen of which I frequently met with outside the plantations in the heath, my dogs setting them like grouse. They were never to be seen together, but kept a mile separate, and each of them always about the same place: the hen I found dead three years ago, and supposed her to have been shot at by a party which Lord O'Neil had here at that time. The cock has left us, or been killed also. I saw a cock that was shot last year at Glenariff near Cushendall (some miles distant), which may have been the same.

"I was at the letting out of nine black game in 1832 in this place, and a single bird of them I never saw afterwards. The reason I cannot assign; it might be that they wandered away, which I believe they are prone to do, or were hurt in coming from Scotland, and died."

John Inglis, gamekeeper at Glenarm Park, thus answered my queries on the subject in January 1841:—

"In reply to your note regarding black game, I am sorry I cannot give a very flattering account of them. There has been one black cock here about four years. I have not seen him for the last four or five weeks, but I suppose him to be still alive. I think it is likely he came from Claggan, as I believe Lord O'Neil turned out some there shortly before the bird was seen here. (The places are about fifteen

was always found to avail itself of the woods, living within them, or on their borders, for a considerable portion of the year. Sir Wm. Jardine,—whose estate in Dumfries-shire is situate in a very fine black game district—has, however, informed me, that wood is not essential at any season, and that these birds are common in localities there in which there is neither underwood nor trees.

miles apart.) At the beginning of August 1839 I went to Scotland, and got nine young birds at Douglas Castle. Two of them died on the passage. I turned out the remaining seven on the hill near the place where the old cock used to haunt; but none of them that I know of were ever seen afterwards. The reason I assign for their not succeeding at this time is, that they were too young, and not fit to manage for themselves without the help of the old bird. In Nov. 1839 I again went to Douglas Castle, got six brace of full-grown birds, viz. seven hens and five cocks; I got them all safe over to Glenarm, where I kept them for two days, feeding them on corn till they recovered from the effects of the passage. I then turned them out in the park quite strong and healthy to all appearance. Some time after, one of the cocks was found dead in the park; he was quite light and thin of flesh. Another of the cocks was shot about the same time in Glenariff, about eight miles from Glenarm. A few of them kept about the park all winter. Sometimes one would be seen, sometimes two, and in the month of March there were three hens and one cock seen together, but about the beginning of May all the hens disappeared, and none of them have been seen since. One cock kept the park all summer, and was seen lately, which is all that I know of here out of the twelve brought over. A cock was shot about two months ago by a gentleman near Ballycastle (about twenty miles distant), which is likely to be another of them. Where all the hens have gone to I cannot say. I am in hopes that some of them may be alive yet, as they are so much like grouse that people who are not acquainted with them would take no notice of them.

"I now come to your last query, which is, *If they ever bred? and if they did not succeed, the reasons assigned for their not doing so?* I really confess that I cannot assign any satisfactory reason whatever, as I have no doubt that full-grown birds would live as well in Ireland as they do in Scotland, if they were only let alone. What I am most doubtful about is, whether they will breed as well; and the reason I am doubtful about this is, that when I was in Scotland, keeper with Lord Douglas, at Douglas Castle, where black game are very plentiful, I used, in hunting the dogs over the ground, to find all the young broods of black game, *not among heath or moss ground where young grouse generally are, but on white or green ground, where sprit and rushes are plenty*, and where you will seldom find young grouse. But when they get strong and able to do for themselves they get into packs, often to the number of forty or fifty, and fly over the whole country, and take both to the woods and corn-fields. When at Douglas last, I was talking to Lord Douglas's keeper about what he thought the young birds fed on. He said that early in the season he had caught some young birds, intending to tame them and learn them to feed, so that I might be better able to get them safe over, but they all died in a day or two. He cut open some of their crops to see what they fed on, and could observe nothing but the seed of the sprit or rush.* Now, from the num-

* A friend who has examined many of these birds, shot in Ayrshire, has frequently found only what he considered to be the seeds of rushes in them. Mr. Colquhoun, in his work entitled 'The Moor and the Loch,' observes that—"They (hen and young) may always be found near a short thick rush, which can be easily seen on the moor, the brown seeds of which form the principal food of the young packs,"

ber of black cattle that are kept on the mountains in the north of Ireland, there is scarcely any sprit or rushes allowed to grow that would be of any use either for cover or food. I have seldom seen black game sit when cattle go near them, and a crow flying over will make a score of them rise and fly away in the latter end of the season, when they are strong on the wing. With respect to the haunts and breeding-ground of young black game, I speak only from my own observations. I am not aware that they haunt the same kind of ground in other parts of the country; I merely wish to direct your attention to it. I know they are plenty in the island of Arran, but do not know what sort of ground they frequent there. As I mentioned before, none of the hens have been seen since the beginning of the breeding time; whether they began to hatch and were killed by some vermin, or wandered away in search of a more suitable place for their purpose, is a question I cannot answer. Lord Courtown's keeper was at Douglas Castle shortly after I was, in November 1839, and got away six brace to his lordship's estates south of Dublin, but I have not heard how they succeeded." A similar want of success has been attendant on birds brought from Scotland, and turned out at Tollymore Park, county of Down. In April 1846 there was still a fine gray hen there, but no male bird.*

How different from this is the case at Ballantrae in Ayrshire, just opposite to Glenarm! When sporting there in 1839 I made the

(p. 6). The low growing *Carices* and rushes (as *Scirpus Savii*, &c.) are commonly called *sprit*, in the north of Ireland, by the country people.

* *Carriage and Vitality of Eggs*.—The following instance of the carriage of the eggs of the black grouse with perfect safety to a considerable distance, after their having been partly incubated, is interesting. In June 1833 Mr. Arbuthnot Emerson had brought to him in Belfast, from Stranraer, Wigton-shire, nine eggs taken from the nest of a black grouse. These eggs were placed under a bantam hen, and in one week seven young birds made their appearance. Two of them soon died, but the remaining five lived for about a month, until cold and wet weather set in, when they all died. The eggs were packed in feathers, and brought by the mail-coach from Stranraer to Portpatrick, where they were shipped on board the steam-packet, put into the mail again at Donaghadee, and in about twelve hours after being taken from the nest (at three o'clock A.M.), were placed under the bantam hen.

On the same subject I have learned from Wm. Sinclair, Esq., respecting a nest of partridge's eggs once brought to him from a distance of eight miles, that they were quite cold when received; but being placed under a common hen, the young birds came out in half the usual time; thus showing that eggs, when half incubated, can be carried to a distance without their vitality being impaired. The same gentleman informs me that having once "set" nine eggs of the domestic hen, he by mistake, at the expiration of two instead of three weeks, went to examine them, and lifting each egg shook it violently to ascertain if it were added. He concluded that all were in this state, and thought no more of them until a week afterwards, when—the twenty-one days having expired—the hen appeared strutting about with seven or eight chickens; the violent shaking in this instance of eggs two-thirds incubated did not injure the contained chick. Mr. W. Sinclair has known his tame pigeons remain off the nest all night when their eggs were half incubated, and though, as in the case of those of the partridge, they felt quite cold, no injury arose from this circumstance,—the young appeared at the expected time.

following note on the 20th of August, after returning from the first day's black game shooting :—the information was chiefly derived from my host.

“Within twenty years a black grouse was an extraordinary sight in the neighbourhood of Ballantrae; and, still later, not more than one or two individuals would be met with during a season's shooting. When first there myself, in the autumn of 1828, I saw numbers of these birds chiefly about the corn-fields adjacent to the mountains, since which time they have been gradually increasing, and of late years have become abundant. This is doubtless attributable to the great increase of cultivation, or the growth of corn in the vicinity of the moors; for with its augmentation that of the black game has proportionally kept pace. Within the period alluded to a vast quantity of mountain-land has been brought under cultivation in this district.

“In grouse ground we met with two or three small packs of black game to-day; but one pack was quite below the moor, and on looking to the crop of a young cock killed there I found it filled with the flowers of all the plants which grew around :—among them were those of the eye-bright (*Euphrasia officinalis*), mountain chickweeds (*Cerastia*), *Ranunculi*, *Carices*; but in quantity much exceeding the others were those of the autumnal hawk-bit, (*Apargia autumnalis*). To my veteran companion, who has shot here for about twenty seasons successively, this plant has long been known as a favourite food of the young black game. In addition to the flowers, were many leaves of a small willow, every one of which taken from the bird was infested with an insect nidus, but its presence was probably accidental. It is in the evening chiefly that the black grouse resorts to the corn-fields, and it does this when the grain is green, as well as when ripe. Both black and red grouse, killed in the course of the day late in the autumn, are not unfrequently found, when opened, to contain oats exclusively, which have been purloined in the early morning.* The farmers in this part of

* Mr. Colquhoun, in his work already quoted, states, from the circumstance of heather never having been found in any black grouse opened by him, that the species never eats it; but this will not apply generally, as proved in the case of birds examined by myself. Examples shot in Scotland, and set up by bird preservers in Belfast, are alone alluded to. They were ten in number, and shot from October to February in different years. *Oct.*—A female was filled with the twigs of heath and other plants; a male contained a large portion of the tops of heath (*Calluna vulgaris*); many of the withered flowers of the devil's-bit (*Scabiosa succisa*); a few of those of *Composite*;

Ayrshire often complain of the damage done to their crops by these species, and more especially by the black grouse. In reference to the common error that this bird increases at the expense of the red game, it may be stated that in this county the numbers of the latter have in consequence suffered no diminution. Although the two species are occasionally found in the same haunts—grey hens and red grouse sometimes being before the dog at the same “point”—their places of abode are generally different. In the autumn of 1837 my friend first saw the hens of the black game packed there, when fourteen or fifteen appeared together. He has seen so many as seventy black cocks in company.

Islay, Jan. 1849.—When beating the covers about Ardimersy for woodcocks, on the first two or three days of this month before frost commenced, great numbers of grey-hens were sprung, and after a few days of frost many black-cocks also, the latter having previously been among the heath of the mountains. The black game season being over according to law on the 10th of Dec., we could not legally shoot any of these birds; although it would have been a very satisfactory way of obtaining them, when beating for woodcocks at the same time. We could not but consider how much better it were, as a general law, that the black game shooting should commence from four to six weeks later than the 20th of August, and continue so much longer after the 10th of December:—the period allowed for shooting them is perhaps long enough. That it commences too early both for them and red grouse, genuine sportsmen—(those who will not raise their guns to shoot miserable “pouts,” although these do count as well as full-grown birds in the report of number killed)—who have been accus-

the flower of a *Ranunculus*; tops of the leaves of the greater plantain (*Plantago lanceolata*); and a few seeds of grasses. *Nov.*—One filled with oats; another with portions of a woody plant, perhaps heath; a third (black-cock) wholly filled with the tops of heath (*Calluna*), except a few bits of the stem of the cranberry (*Vaccinium oxycoccos*) and leaves of *Scabiosa succisa*. *Jan.*—Black-cock filled with tops of heath (*Calluna*) except a few flower-buds of the hazel; a second with oats and the tops of heath, which apparently had given a pink tinge to the grain longest in the stomach; a third filled with flower buds of hazel and birch, together with a few green tops of herbaceous plants; a fourth entirely filled with yellowish-green woody matter, probably of the bilberry (*Vaccinium myrtillus*); as the only perfect pieces of the stem were of that plant:—heath seems to be the cause of a reddish-tinge being imparted to the whole matter in the stomachs of red-grouse. *Feb.*—Black-cock wholly filled with the male flowers of the hazel in an unexpanded state. Fragments of stone were in all the gizzards.

tomed to be on the moors on the 12th and 20th of August, in pursuit of the respective species, will doubtless admit. The black-cocks are said by the keeper to come much at this season (early in January), be the weather what it may, to the covers in which we met with them, where they feed on the buds of the trees,—those of the birch and hazel being preferred. They continue in the woods from this period until the breeding season commences, but are considered, now as well as at all other times, to remain on the ground during the night.

In the comparative lowlands of the south the black grouse is much more common than in the wilder and more mountainous highlands of Scotland. To mention my personal experience only, I have, whilst visiting sporting friends in various parts of that country, remarked the noble black-cock to be much more frequent in different parts of Ayrshire (in Dumfries and Wigton-shires, and in the island of Islay) than in more northern shooting quarters. In the district around Meggarnie castle, on the banks of the Lyon, in the north-west of Perthshire, rich in all the grandest features of highland scenery, these birds were rather scarce in 1829, and our party one day resorted to the *battue* system to obtain a few brace. Their haunt was chiefly in the fine heathy and ferny glades, which with gleams of light broke in upon and picturesquely varied the otherwise monotonous natural woods that clothed the banks on the side of the river opposite to the ancient castle,—these banks being also favourite haunts of the graceful roe-deer. The jetty black-cock springing, as he sometimes did there, from the underwood of rich-green juniper, appeared with fine effect. About the extensive and admirable grouse moors of Aberarder and Dunmaglass, in the north of Inverness-shire (possessing, too, abundance of suitable ground for black-game, with the remains of natural woods on the lower skirts of the mountains), they were still more rare; and during the month of September 1842, which I spent there, not one was killed. A few frequented one portion of the ground; but they were not sufficiently numerous to tempt us to go in pursuit of them. They were reported as becoming gradually scarcer in both these localities. Sportsmen generally are indifferent about them, where red-grouse are numerous; the pursuit of the latter affording, in every respect, so much better sport.

*On Hybrids produced in a wild state between the Black-Grouse (Tetrao tetrix), and Common Pheasant (Phasianus Colchicus).—*I made

the following communication to the Natural History Society of Belfast in December 1836, and at the same time exhibited the specimen of which it treats. The article was afterwards published in the *Magazine of Zoology and Botany*, vol. i. (1837).

"Having lately heard that a hybrid bird, bred between the common pheasant and black grouse, had been shot in Wigtonshire, and was preserved for Sir Andrew Agnew, Bart., M.P., I proposed a few queries respecting it through the medium of our mutual friend, Captain Fayrer, R.N. Sir Andrew, on receiving these, considered that an examination of the specimen would prove more satisfactory than a mere reply, and with the kindest consideration sent it from Lochnaw Castle for my inspection. He stated that the bird was shot in the autumn of 1835 in a wild state at Lochnaw, where it had previously been seen several times on the wing. Pheasants and black grouse are numerous in the surrounding plantations; but this is the only hybrid that has been observed.

"In four instances only am I aware of similar hybrids being recorded.* The first is mentioned in White's *History of Selborne* as a curious bird, shot in a coppice at the Holt, and sent by Lord Stawell for his inspection. Its parentage was not correctly assigned by Mr. White, nor even by several later authors who have endeavoured from his description to determine it. In a note, however, to p. 344 of a late edition of that work (8vo ed. 1833), the Hon. and Rev. William Herbert mentions having seen the specimen in the collection of the Earl of Egremont at Petworth, and speaks decisively to its true parentage. The second specimen was exhibited at a meeting of the Zoological Society of London, on the 24th of June 1834, by Joseph Sabine, Esq., who stated that it was bred in Cornwall.† The third, shot near Merrington in Shropshire, was announced to the same Society, on the 12th of May 1835, by T. C. Eyton, Esq., by whom it was described in some detail.‡ In the preface to a subsequent publication ('*History of the Rarer Species of British Birds*,') Mr. Eyton informs us that the brood to which this bird belonged consisted of five individuals, all of which were killed, though two only are preserved. In the same work (p. 101), the fourth and last I know to be on

* Other birds of a similar kind, subsequently recorded, will be found noticed in Yarrell's *British Birds*. Note of 1849.

† *Proc. Zool. Soc.* 1834, p. 52.

‡ *Ibid.* 1835, p. 62.

record, is mentioned as having been obtained near Corwen in Wales. It is in the possession of Sir Rowland Hill, Bart.

“There is not any notice of similar hybrids in the continental works which I have had an opportunity of consulting, and as Temminck is silent on the subject (in his comprehensive publications, ‘Histoire Naturelle Générale des Pigeons et des Gallinacés,’ and ‘Manuel d’Ornithologie de l’Europe,’) such birds have most probably never been met with on the continent of Europe.

“Mr. White’s description, with the exception of the ‘legs’ being ‘bare of feathers,’ applies admirably to the present specimen. He observes, ‘The shape, air, and habit of the bird, and the scarlet ring round the eyes, agreed well with the appearance of a cock pheasant, but then the head and neck, and breast, and belly, were of a glossy black; and though it weighed 3lb. 3½oz., the weight of a large full-grown cock pheasant,* yet there were no signs of any spurs on the legs, as is usual with all grown cock pheasants, who have long ones.

* * In the tail were no long bending feathers, such as cock pheasants usually have, and are characteristic of the sex. The tail was much shorter than that of a hen pheasant, and blunt and square at the end. The back, wing-feathers, and tail, were all of a pale russet, curiously streaked.’ With the little that is related of Mr. Sabine’s bird, the present individual agrees; but it differs much both in colour and dimensions from Mr. Eyton’s specimen. This latter is a female; the one under consideration is presumed to be a male. In the following table its dimensions are contrasted with those of the cock pheasant and black-cock.

	<i>Black Cock.</i>		<i>Hybrid.</i>		<i>Cock Pheasant.</i>	
	<i>In. Lines.</i>		<i>In. Lines.</i>		<i>In. Lines.</i>	
Length (total)	20	†0	25	3	34	0
— of tail			9	0	19	0
— wing from carpus to end of longest quill	9	9	10	3	9	9
— bill above to first feathers on ridge	0	8	1	1	1	0
— bill to rictus	1	2	1	5	1	4
— tarsus	2	2	3	1	3	1

* Though the weight of the present specimen cannot now be determined, the size of the body is equal to that of the cock pheasant.

† To centre of tail.

				<i>Black Cock.</i>		<i>Hybrid.</i>		<i>Cock Pheasant.</i>	
				<i>In.</i>	<i>Lines.</i>	<i>In.</i>	<i>Lines.</i>	<i>In.</i>	<i>Lines.</i>
Length of middle toe	.	.	.	1	10	2	0	1	11
————— to nail	.	.	.	0	8	0	7	0	7
————— hind toe	.	.	.	0	5	0	7	0	8
————— to nail	.	.	.	0	4½	0	4	0	4

Fourth quill longest in hybrid and black-grouse; 3d, 4th, and 5th equal in pheasant.* Tail of hybrid extending $5\frac{1}{2}$ inches beyond closed wing, rounded on expansion, containing 17 feathers, all but the longest being regularly matched: it has probably lost one; 18 being the number both in the pheasant and black-grouse. Bill in form differing only from the pheasant in having the upper mandible less arched. Tarsi and toes in form like the pheasant's, but having many more plates; tarsi, bare on the sides and behind, but feathered in front for half their length. Naked skin about the eye equalling in extent the pheasant's, but differing in form both from it and the black-cock's by merely appearing in advance of the eye, and broadening out to the extent of half an inch just behind it. There is none above the eye as in the latter bird. *Form* of the feathers on the head, neck, breast, back, belly, and under tail-coverts, intermediate between that of the two parents; of the scapulars, quills, and wings approximating that of the black grouse. Form of the tail-feathers unlike that of either species.

"In *colour* the hybrid has head, neck, breast, and belly black; each feather when viewed in the light, terminating in a band of rich claret colour tinged with gold, which decreases in breadth downwards, until at the lower part of the belly it disappears. On laying back the breast feathers, the inner ones exhibit about an inch or less from the tip, a somewhat semicircular band of a cream colour; the inner feathers at upper part of the back similarly examined, show the cream-coloured marking of the pheasant, the remainder of the feather being black, except the termination, which is of a claret colour. Upper part of back, wings, and tail, not resembling either sex of black-grouse or pheasant, but having a soft blending of grey, brownish-yellow, and black, beautifully undulated; quills differing only from the black-cock's in the shafts being blackish-brown. Tail-feathers obscurely

* By pheasant the male bird is meant throughout, when not otherwise expressed.

undulated with black and brownish-yellow, and transversely barred with black, the bars on the outer feathers occupying as much space as the mottled plumage, their tips black for about $1\frac{1}{2}$ inches; this colour gradually lessens towards the central feathers, the five longest being mottled at their extremities. These present a singular reverse to the longest tail-feathers of the pheasant, in which the bars become broader as they approach the end; in this bird they altogether disappear there. Some of the feathers on the wing-coverts have the shaft cream-coloured, with the centre black, ending in a point towards the tip, as in the pheasant; but the cream-coloured band surrounding it in that bird is wanting, and the extremity of the feather is mottled. The lower part of the back and rump has a blending in about equal quantity of black and mottled plumage, each feather terminating in claret colour. The only white in the plumage is a spot on the shoulders similar to that exhibited by both sexes of the black grouse, and some markings of that colour on the vent feathers. Under tail-coverts black, mottled with rich reddish-brown at their tips. Bill intermediate between the greenish-horny colour of the pheasant and the black of the Tetrao tetrix. Tarsi and toes also intermediate.

“Mr. Sabine and Mr. Eyton describe their hybrid specimens as bred between the cock-pheasant and grey-hen. But that the produce is as likely to occur from the opposite sexes of those species, is indicated by the following circumstance. A black-cock, a few years ago in the possession of my friend Wm. Sinclaire, Esq., of Belfast, having been kept along with a cock and two hen pheasants, beat and drove away the cock whenever he approached the hens in spring; and as a brood of pheasants was wanted, had to be removed to another enclosure. The black-cock at the same time displayed towards these hen pheasants all the attitudes by which, in a wild state, the attention of the females of his own species is attracted. The naked scarlet skin above each eye was so protruded and prominent as to give the head somewhat of a crested appearance, and the finely arched tail was thrown up like that of the turkey-cock when strutting about in his pride. The love-call, so loud as to be heard at a great distance, was almost incessantly uttered. He was a bird of the previous year, taken in autumn by John Sinclaire, Esq., on his shooting-grounds in Ayrshire, after having been ‘put in’ by one of his trained peregrine falcons. He lived in confinement for nearly two years.”

THE PTARMIGAN.

White Grouse.

Tetrao lagopus, Linn.

Is not known as indigenous, nor even as a visitant to Ireland.

ON the loftiest mountains of England—those of Cumberland and Westmoreland, and, it is said, of Wales—this bird once found a home, but has long ceased to do so. Within the British seas, Scotland and her islands only can now claim it as a native species. That there is not in any part of Ireland a continuity of mountains sufficiently elevated to be the ptarmigan's abode, I was disposed to believe until lately, and thus to account for its absence from the island. But having ascertained in Islay that it always inhabits, though in very limited numbers, the loftiest stony ridges of that island, and is common at all times on the Paps of Jura, its absence from Ireland must be attributed to some other cause, as in various parts of the latter kingdom are extensive ranges of mountains of superior altitude to those of Islay and Jura, and possessing granitic and schistose summits, such as this bird chiefly frequents.* It is remarkable that the species should thus at the present day be found in the two most southern islands, which lie oceanward from the western mainland of Scotland, and so near to Ireland as to be almost daily visible from her shores; yet that there is no record (at least none known to me) of the ptarmigan having at any period been a denizen of our soil.

The want of such a bird is to be regretted, associated as it is in the mind with the sublimity of nature. Its favourite haunt is on the lofty mountain summit where rarely any human being, except the lonely shepherd, intrudes upon the solitude; or where perhaps once or twice in the year the adventurous naturalist or sportsman may be tempted to wander. In ignorance of man's evil intents against them, a family of ptarmigan will admit of his near approach, *walk* off before his dogs, or tak-

* The present keeper at Ardimersy, Islay, when once accompanying the "young laird" there, shot a ptarmigan, which, to his astonishment, appeared on the fence of a stubble field, in open weather, close to a farm-house, and two or three miles from the nearest mountain-top. Islay is more southern than any Scottish island which I have seen named as the abode of the species. A gentleman has assured me of his shooting several of these birds in autumn so far south on the mainland as a mountain-top near Dunoon, on the Clyde, in the wild district of Cowal.

ing wing alight on the rocks before him in the manner of tame pigeons.* Of all British birds, too, this is the most interesting, in consequence of the changes of plumage—every one of them beautiful—through which it passes. We hardly draw on the imagination by viewing its plumage as an exquisite miniature of the seasonal changes which the mountain summit undergoes ;—a miniature drawn, too, by a Hand that never errs ! In summer, we look upon the beautiful mixture of grey, brown, and black, as resembling the three component parts of ordinary granite—feldspar, mica, and hornblende—among the masses of which the ptarmigan commonly resides. Late in autumn, when snows begin to fall about the lofty summits, and partially cover the surface of the rocks, we find the bird pied with white ; and in winter, when they present a “perfect chrysolite” of snow, it is almost wholly of the same pure hue.

Some of the granitic masses, as those of Mont Charmoz, &c., which rise above the Mer de Glace at Mont Blanc, were said, in July 1826, to be inhabited by ptarmigan, and I spent part of a day in search of them, but in vain. An English sportsman then staying at Chamouni, was daily in pursuit of ptarmigan and chamois among those mountains, and occasionally returned with spoil consisting of both kinds.

Mr. Macgillivray gives a full and admirable description of the ptarmigan, as observed by him in some of its Scottish haunts, including ample observations on the changes of plumage to which it is subjected.

* This may be considered a well known fact. A relative who had shooting quarters in Ross-shire—on the banks of the Beulay, and close to Loch Monar—in the season of 1835, informed me, on his return, that on several days he had shot four or five brace of ptarmigan. When his dogs pointed, and the birds were but a few yards distant, so great was their assimilation in colour to the surrounding rocks, that he could not distinguish them so long as they remained motionless. They soon, however, stretched their necks, and *walked* off before the dogs. On being further disturbed they took wing, but only to alight like a flock of pigeons on the tops of the adjacent stones. My friend verifies the accounts of their being in general easy of access ; but states that, like other game, they are wild when the ground is wet.

THE RED GROUSE.

Red Game.

Tetrao Scoticus, Lath.

Is common throughout extensive heathy tracts in Ireland and the adjacent islets ;*

BEING found equally in those barely elevated above the sea and those which empurple the summits of the highest mountains. In the most favoured localities the species was, until of late years, as plentiful in proportion to the extent of heath as in the Highlands of Scotland, and in some districts still is so, but its numbers, generally speaking, have been gradually decreasing from various causes, connected with the operations of man. The birds are not protected with the same jealous care as in Scotland, where the moors are a source of great revenue ;—those of Ireland are, on the contrary, with rare exceptions, reserved by the proprietors for their own or their friends' shooting. It has been remarked to me by sportsmen, that the grouse of Ireland and Scotland differ in size and colour. This is apparently correct when birds of a certain district are compared with those of another ; but it is, in my opinion, a partial view of the subject, as in different localities throughout either the one country or the other, birds will be found equally to vary in these respects. The following observations strikingly illustrate this opinion :—A friend who shot over the moor of Glenroy, Inverness-shire, in 1844, observed that the grouse differed much in their plumage, and were of three varieties, each kind keeping particularly to its own quarters. On the darkest and most heathy ground were the darkest birds, and the largest, weighing generally 2 lb. and sometimes 2 lb.

* Lieut. Reynolds, R.N., of the Coast Guard Service, an ardent sportman, who was stationed at Achil in 1834, when Mr. R. Ball and I visited the island, stated that neither partridges nor quails were at that time found there. As the island is chiefly covered with heath, grouse might be supposed to be common ; but they were said to be scarce, owing to the number of foxes and other vermin, and the destruction caused by herdsmen's dogs.

2 oz. On the rocky parts they were of a very much lighter brown; while on the stony and heathy ground combined they were of an intermediate brown, mottled more or less with white.

On the range of the Belfast mountains, rising to nearly 1,600 feet in altitude, the grouse still maintains its ground. In the evenings of summer and autumn, when taking a favourite walk to the mountain ridge to behold the grand and varied prospect on every side,—above all to watch the down-going of the sun behind the distant mountains on the farther side of Lough Neagh, and see the great expanse of waters steeped in the most lovely hues,—the crowing of the grouse has almost invariably enlivened my walk home. To my ear the call is delightful, from its association with the wildness of nature. When undisturbed at such times, the alarm note, well known to sportsmen as a repetition of “the syllable *kok*,” was rarely heard; but the crowing which is admirably represented by the words “*go, go, go, go, go back, go back*,”* was continued for a long time, commencing, at the end of August and during September, about half an hour after sunset, and continuing sometimes for nearly an hour. During one of these walks, in the month of June, a pointer dog was inconsiderately allowed to follow me, and by his trespassing on the breeding haunts of the grouse, lapwing, and snipe, he caused a continued uproar from the three species, akin to what we hear from the various birds on the sea-shore.

As observed by Mr. Poole, when on a pedestrian excursion among the Comeragh mountains (Waterford), “‘Go back, go back, go back,’ was repeated as well and as distinctly by this bird as man could utter it, and in such wild and dangerous solitudes it sounds like a warning from some supernatural being, which, if timid, one feels more than half inclined to take.” There were lately, for a considerable period, in the aviary of the Royal Botanic Garden, Belfast, two male grouse from which these

* Macgillivray's ‘Brit. Birds,’ vol. i. p. 181, where it is added that “the Celts naturally imagining the moor-cock to speak Gaelic, interpret it as signifying *co, co, co, co, mo-chlaidh, mo-chlaidh*; that is, *who, who* (goes there?), my sword, my sword!”

and other notes might frequently be heard at all hours of the day throughout the year: they were uttered without regard to the number of persons near the aviary at the time. Indeed the birds became so familiar or bold as to utter their "go back," and "go away," when persons approached the aviary, and they replied in these words to those who imitated their calls. They were accused of saying to intruders "be off," as distinctly as "go back" and "go away," and certainly their notes fairly bore this interpretation. The birds were generally believed to use the words in the same sense that their hearers would do!

The red grouse appears to breed rarely in confinement. Among the few instances on record, Daniel, in his "Rural Sports," mentions three, one of which was in Ireland, at Rathfarnham House, county of Dublin, in 1802. Mr. Howard, of Roundtown, near Dublin, informed me, when visiting his interesting collection of living birds in May 1849, that a pair of red grouse, which he had a few years ago, bred; five young being produced and reared.

I have twice within about twenty years known single grouse to be killed on a low and narrow bare strip of land, called the Kinnegar, which stretches in a direction parallel to the nearest line of coast—a miniature promontory—into the bay of Belfast, about four miles from the town. On both occasions there was a little frost and a powdering of snow on the mountains at the opposite side of the bay, the nearest haunt of the species; about as much as drives the golden plover thence to the vicinity of the sea. The first of these grouse, indeed, was credibly stated to have been seen coming from the direction of the mountains in company with a flock of golden plover. The second was killed on the 9th March, 1849.

The grouse breeds very early. On the 17th of March a sporting friend once found a nest, containing eleven eggs, on the Belfast mountains. When hare-hunting here so late as the middle of April, I have more than once, to my great regret, seen the pack of hounds come upon the nest, and set to work so quickly, that every egg was devoured before the dogs could possibly be whipped

off. Fortunately, this bird breeds a second time, if the first nest be destroyed.

The grouse is occasionally subject to variety in colour. One shot in November 1826 by the Rev. Lord Edward Chichester, near Doagh, in the county of Antrim, was pure white, with the exception of the two outer primaries, and an equal number of the feathers of the greater wing-coverts, which remained unchanged. It was a large and healthy-looking bird.

For the fact that the grouse is a good bird for the table, we have no less an authority than that of the illustrious John Locke! In the life of this philosopher by his descendant, Lord King, are directions, &c. from Locke, apparently addressed to some foreigner about to visit England, one sentence of which is—"Railes and *heath-polts*, ruffs and reeves, are excellent meat wherever they can be met with."—Page 134.

My friend John Sinclaire, Esq. of Belfast, who has been a regular grouse-shooter for upwards of sixty years, has not only found grouse, occasionally in stubble and grass fields a mile distant from the mountain heath about Ballantrae, Ayrshire, but has sprung them from the heath growing in plantations of young trees about fifteen feet in height. He attributes the scarcity of grouse in many places to the increase of sheep pasturing. The nests of this bird are trodden on by the sheep: the burning of the heath on account of the latter, even if practised at a proper season, deprives the grouse of shelter for some years; and by its frequently being carried into execution in the early spring, destroys their eggs. Where horned cattle are pastured, grouse are considered to be as numerous as ever. The black game, breeding as it does in marshy places, is not subjected to the casualties just noticed; hence one reason of the decrease of the former, and increase of the latter, in some districts. From the manner in which a pack of grouse springs, it is rarely that more than two fall to the one barrel, and when three do so, it is considered extraordinary. Before the gun of my friend—an excellent shot—this number has fallen; he has twice obtained, by a double

discharge five birds, from one pack. In one of the instances the pack consisted of only seven birds.

On looking to the food contained in numbers of grouse when their favourite berries were not to be had, I have found it to be chiefly the tops of heath, with occasionally the stem of the bilberry (*Vaccinium Myrtillus*). Portions of the fir club-moss (*Lycopodium selago*), about an inch in length, being occasionally found strewn about the mountain-tops, appear to me as indicating its being used as food. On opening the intestines of a deceased bird, shot on the 14th of August at Ballantrae (but which had been wounded perhaps three weeks before), I found them nearly full of tape-worms (*Tenia*). Its gizzard was entirely filled with the fruit of the *Empetrum nigrum*, there called heather-berry. My friend just alluded to has very frequently found oats in the crops of grouse killed in the last-named locality. They are considered to resort to their feeding grounds there in the evening, about an hour before black game.

Although Ireland is deficient in the wood grouse, the black game, and the ptarmigan, all of which are doubtless more admired when displayed in museums than the red grouse, yet this bird, which the island does produce, is, in the estimation of the sportsman, and consequently in a pecuniary point of view, by far the most valuable of the four;—more so indeed than any other species of grouse.* It is unknown beyond the limit of the British Isles, and is the only bird peculiar to them. With the Highlands of Scotland, however, rather than with Ireland, the *Tetrao Scoticus* is mentally associated; vast tracts of mountain heath there often deriving their value from it alone.

Nothing can be more invigorating, mentally or bodily, than the withdrawal for a time from the bustle of town civilization to the pure air of the mountain solitudes where this bird is found, and in the midst of which the sportsman formerly—before grouse

* See article on 'Highland Sport' Quarterly Review, Dec. 1845 (vol. lxxvii.)—(nominally a review of Scrope's "Days and Night's of Salmon Fishing") for statistics on the subject of the Red Grouse; also a Letter from the Earl of Malmesbury to Sir George Grey on the "Revision of the Game Laws," p. 8, &c. (1848.)

shooting became so general—literally pitched his tent for a season. The pursuit brings him into scenes that he would never otherwise behold, and which, with salutary effect, become indelibly impressed upon his memory. The ever-varying landscape of a fine sporting moor, which generally possesses the grandest and most picturesque elements combined, is one of the greatest charms of grouse-shooting. To give some little idea (though a very faint one) of this, a few brief extracts from a journal kept by the author at Aberarder, Inverness-shire, during September 1843, may be introduced. The main features only are selected, but these will suggest the charming accompaniments, both of animate and inanimate nature, that are usually found in connexion with them.

Sept. 6.—We rode six miles out to Crooked Glen to shoot. The ride, through wooded, wild, and rocky mountain glens, with their rushing torrents, was extremely fine. The mountain sides beautifully displayed the light-foliaged and graceful birch, disposed in extensive masses, in little groups, or in single trees; with the occasional variety—in the drier and more stony places—of the rowan and the rock-willow (*Salix caprea*), and in the lower and moister parts, with the alder. Extensive plantations of pine (artificial however), reaching to the mountain tops, added much to the wooded prospect in some directions; the dark green hue of this tree harmonizing admirably with the deep purple of the heather, and the dull grey of the granitic rocks. I was much struck, (as I have often before been in such localities,) with the circumstance, that all indigenous trees were old, and that there was not a young one springing up to supply their place. Before two generations of men shall have passed away, there will be hardly a tree of spontaneous growth left in parts of Scotland now admirably and picturesquely wooded. Such is the effect of every available spot being appropriated to sheep or oxen. To my remark, “What a fine locality for roe-deer,” the reply was, “Yes, they *were* abundant there; but cattle have taken their place;”—this, too, on a steep mountain-side. Black-game had also been numerous in the same district, but they have been

almost exterminated by the herds, who—now daily on the ground—discover their nests and carry off the eggs.

Sept. 13.—We had a ride of seven miles from the shooting lodge, before reaching our ground at Glen Marson. On attaining the summit of the first hill, the view of apparently fine grouse mountains on every side was superior to anything I had seen. Instead of presenting the hoary whitish aspect of the high Aberarder ground, they were deeply browned with heath, and their steep sides were in some places adorned with woods of the graceful birch. Luxuriant junipers clothed the bases of the hills, and the lower parts of the steep banks of the streams. Their absence from the higher and more exposed grounds was striking; appearing as if they had resigned those to the heath, and then crept out of the range of wind into the most sheltered places. Yet we often find the juniper in the clefts of the most lofty mountain summits in these islands. A profusion of the finest berries appeared upon these plants, on which no doubt some ring-ouzel which rose from amid them had been feeding, perhaps taking their farewell repast before moving far southward to winter in a genial climate. Beneath the shade of the junipers, that delicately beautiful fern, so like a native of the tropics, the *Polypodium dryopteris* (Linn.) appeared quite brown and withered, though its tender green fronds are still exhibited, as freshly as at midsummer, about the exposed and precipitous banks of the waterfall of the Nairn before the shooting lodge. Around this fall, the *Polypodium phegopteris* (Linn.) is also of great size and beauty. The different appearances of the individual junipers was very striking, some of them strongly resembling their prototype in North America, commonly known as the red cedar (*Juniperus virginiana*, Linn.)

The day was lovely, and the views, though not very extensive, were to a sportsman most captivating. Red deer had been on the ground not many hours before, and the true wild cat (*Felis cattus*) frequents the rocky and in many places inaccessible banks of a mountain torrent which crossed our path. The grouse were very wild. Our party separated, and soon afterwards a friend who was on the higher ground sprang some packs at which he

did not get a shot; but as they flew wildly past my companion and myself, several were brought down at very long shots, rather after the manner of wild fowl (*Anatidæ*) than of grouse shooting.

On first observing the hoary greyish appearance of the mountains about Aberarder, and being told that they were good grouse ground, I was much surprised, and became anxious to ascertain its cause. An examination of the localities showed that it arose wholly from the preponderance of the rein-deer lichen (*Cladonia rangiferina*, Linn., sp.) over that of the heath, this lowly cryptogamic plant prevailing to such an extent as to make the mountain sides and tops appear hoary even from the distance of many miles. They have the aspect of being bare of vegetation, or as if the heath had been burnt off them. A hill over which we one day shot, was covered with soft round cushions of this plant; not more than a little sprig of heath, occasionally rising through it. The summit of Cairngregor, the highest mountain in the shooting ground, is wholly of a pale greyish hue from the predominance of that lichen; but here and there through it the *Lecidea fuscolutea** (Dickson, sp.), in snowy-white patches about the size of the hand, met the eye in an interesting manner, from their having precisely the appearance of hoar-frost. The *Cetraria Islandica* (Linn. sp.), though not attracting attention like the other two species, humbly bore them company. The *Lecidea* just mentioned was also found on mountains of moderate elevation.

The picturesqueness, literally speaking, of a grouse-shooting party in the Highlands is often extreme. The following note on this subject was made on *Sept. 5th*. Six men with the guns, game-baskets, and bags, dogs, &c., were sent off about an hour before we (five of a party) started to ride to the ground on highland ponies. The men (of whom one was in highland costume) and dogs awaited us on a beautiful green bank on the margin of

* A name applied to the plant on account of the apothecia being of that colour; the crust is snow-white.

an alpine torrent environed by mountains of wholly different aspect, though rising more or less precipitously, on the three sides; the fourth side being the defile from which we had just emerged. Being a little in the rear I could not but pause to view the whole group, when my friends and their shaggy steeds had joined the others. Not only did the ponies and dogs all differ from each other, but no two men of the party were similarly attired:—no graceless “round hat,” as objectionable to the eye of the painter as to that of the native of the east, disfigured the scene. The entire group, in their various attitudes, amid the sporting paraphernalia, and surrounded by such scenery, was greatly more picturesque than any I ever beheld even on the canvas of a Landseer or a Cooper.

The effects of sunlight and shadow, storm and calm, are ever imparting variety to such scenes. We are often, with a vast extent of country in view, quite alone amid the heathy mountain solitude, from which the only movement suggestive of life upon the earth is derived from the dark shadows of the clouds, moving sometimes with slow and majestic, at others with hurried pace over the distant range of mountains, and again pausing for a time on the sunlit slopes, so as to deceive the eye by their similitude to tracts of heather. Or we may, from a hill-top look down upon a rainbow apparently lying in all its beauteous hues upon the plain beneath, like a ray of the setting sun upon the ocean, and suggesting a still more brilliant and airy “path of rays” than even that immortalized by the poet.

The following brief notes on different species of grouse, will perhaps interest some readers, although they do not refer to the subject matter of the work. They were communicated by my late friend George Matthews, Esq., J.P., D.L., of Springvale, in the county of Down, whose observations on our native birds are often mentioned in these pages. That gentleman, with three companions of congenial taste, made a sporting tour to the coast of Norway in 1843, and remained from the month of June till Feb. 1844, between Trondjeim (Drontheim), and Bosicop on the Alten Fiord. An account of this tour written on the spot by Mr. Matthews, and entitled “*Rough Notes of a Lark among the Mountains and Fiords of the North*,” appeared in the *Northern Whig*, a Belfast newspaper, in a series of letters addressed to his friend,

the editor, most graphically describing the sporting and scenery, as well as the manner generally in which the party spent their time.

Mr. Matthews, being an inveterate sportsman, subsequently visited the United States of America for the purpose of indulging his taste for two years in the wilder portions of the Western States, and in the Oregon territory. Having, however, met with a party at Baltimore proceeding to Vera Cruz, he joined them with the intention of paying a brief visit to that place, and some of the inland parts of Mexico. But, alas! embarking at Havannah, in Feb. 1847, for Vera Cruz, in the Royal Mail steam packet Tweed, which was wrecked upon a reef, he was one of the many who perished. He was only about 27 or 28 years of age.

These notes were given to me in manuscript by my much lamented friend, but have been partly anticipated in his "Rough Notes, &c.," already alluded to.

Aug. 1843.—In the neighbourhood of the Salten river, "one night I had gone up the hills by myself to shoot; killed some black game; afterwards fell in with several *capercailzie*s: could not get a shot, as they were very wild. While I was after them, an old cock rose at about a hundred yards from me, out of some dwarf willows * * * I saw the splendid bird clear the trees, and make for the other side of the valley.

"We found *black game* common from Trondjeim (Drontheim) to Dyroe, the most northern place at which they were met with.

WILLOW GROUSE (*Tetrao saliceti*).—"We found, from Trondjeim northwards, but not in great numbers, until we were once within the arctic circle; then almost every island where there was any birch cover contained them. They are not the same colour as our grouse (*Tetrao Scoticus*), and turn white in winter. They are redder, and have at all seasons white feathers in their wings; they do not go out into the open heather as ours do, but keep among the birch and juniper-scrub. In winter they bury themselves in the snow; collect into immense packs and are very wild, keeping to the high ground and bare places. The winter (1843) I was in the north, the snow did not come on till late, and we could see the packs on the mountains at immense distances, as they had turned white. We used, then, to take our rifles and shoot them. I have shot three or four brace with ounce balls, and not injured the bird so much that we could not use it: we got very expert at this work, as also picking off ducks with rifle balls." The following notes relate to particular localities:—*July*: near the river Nid. "I shot some grouse on the mountains here at 12 o'clock at night; it was then as bright as day, without the glare of the sun. *Aug.* 17.—After walking two or three miles from Tromso, I came to some capital ground; found the grouse plenty, and blazed away. I soon expended all my powder and shot, having taken with me much less than usual. Nevertheless, I returned in time for dinner with a capital bag—ten brace of grouse, two brace of golden plover, and an alpine hare. Grouse-shooting is very difficult in this country, as the birds are found among birch scrub, and not among heather or in open ground as in Scotland. It is very difficult to keep near your dog, or to keep him in sight. In some localities the inhabitants cut the young shoots for winter fodder for their cattle. By

this process the birch scrub is rendered very thick ; and unless a bird is shot dead you often lose it. When the cover is higher than your head, as it sometimes is, shooting grouse among it is sharp work. I lost several birds at Tromsøe in this sort of stuff. Occasionally, I had three or four down at the same time in different directions, and as I went to get them, at every few yards, others were springing up on all sides. I was obliged to part with nearly all my scanty dress (the weather was intensely hot), hanging it on bushes to mark the different spots where the birds fell. My dog being very staunch and steady, I managed charmingly. I shot very well that day, and regretted not having more time and ammunition, as I could have gone on bagging at the same rate for hours."

Sept. Island of Loppen.—"We had a couple of hours' daylight ; went ashore, found grouse plenty, and returned before dark with good bags. The mainland is nearly all covered with snow, while the islands, especially those to seaward, are almost entirely free from it. When covered with birch and other dwarf bushes, together with the different lichens growing on the rocks, the variety of the tints renders their appearance beautiful and brilliant. The grouse come down in large numbers to these islands from the mainland. They are nearly all white now ; those which are not entirely so, are very pretty. We landed after breakfast next morning, prepared for work, and as the island rose on the land side in a steep incline from the water to a very great height, while it descended sheer and abrupt seaward, we could mark almost every bird. K——n and B——e went in one direction, L——e and I in another, in order to try which party could kill most game. L——e and I were victorious, having bagged some two-and-twenty brace of grouse before mid-day, when we were driven off the mountain by a most terrific squall, the precursor of a long-continued storm.

"PTARMIGAN we saw in numbers in the Arctic Circle, in September and October. They are just the same as ours, but differ from the grouse of Norway in their claws and beaks, which are black (those of the grouse white) ; they turn white in winter as well as the grouse. They get into immense flocks and are difficult to approach, especially before a change of weather ; a remark which applies to the grouse also. Sometimes during a very severe winter they suffer much from want of food, and become so weak that numbers are killed with sticks. They, as well as the grouse, are very migratory. We have found their traces all along the coast and islands ; in many places feathers and immense deposits of their droppings among the mountains, but in the neighbourhood not a single grouse or ptarmigan : we imagined that they moved about as food became scarce or plenty.

"Brunøe Sound, *Nov.* 1843.—When we left our last anchorage, Bergsfjord, we determined to go to an island called Karlsoe, as we had heard that grouse were very plentiful on it. Two or three years before, Sir Hyde Parker killed eighty brace in two days there. We encountered broken weather, day after day, and were obliged to bring up in all sorts of creeks and places ; among others, we came to an island, called Arnoe, and had to beat through a long, narrow channel between it and another island. These islands are very steep and mountainous. While beating through the channel, we landed and shot along the mountain side, keeping pace with the sloop.

On this island we killed a great many ptarmigan as well as grouse. The ptarmigan frequent the most broken parts of the mountains; and scrambling after them, for walking I cannot call it, was hard work. As there were great quantities of ice among the rocks, which, in many places, were quite coated with it, and also a great deal of snow, which hid the dangerous places, and brought us into many a trap, we got numberless severe falls. I am astonished we did not break our necks. We have all deserted grouse-shooting, and stick to the ptarmigan. It is much more difficult, and therefore we like it better. Being obliged to come to an anchor in this passage, and remain there several days, before we could get clear of it, we blazed away at the ptarmigan. I should like to see some of our dandy sportsmen at such rough work. Disappointment ensued at Karlso, which is a small island, only six brace of birds having been obtained. This was accounted for by the low cover, (which the grouse of Norway like,) having been destroyed; also by the migratory disposition of the birds, rendering the falling in with them in any great numbers at a particular place a matter of uncertainty."

THE COMMON PARTRIDGE.

Perdix cinerea, Briss.

Tetrao perdix, Linn.

Until of late years inhabited cultivated grounds and their vicinity throughout the island in moderate quantity; but never prevailed to the extent that it does in many parts of England, and in the south of Scotland.

FIFTEEN to thirty years ago—previous to its becoming scarce—six to eight covies would be about the largest number met with during a day's shooting in the best partridge districts, within a dozen miles of Belfast. The cause of this scarcity, extending even to the extinction of the species in many places, is sought to be accounted for in various ways, but, generally, by too limited a view of the subject being taken. The following paragraph appeared in the *Northern Whig* of October the 28th, 1843:—

"CAUSES OF THE SCARCITY OF PARTRIDGES IN IRELAND.—All sportsmen are aware that wet summers and cur dogs are very destructive of game; but few know that the present system of

pickling seed wheat is what has nearly exterminated partridges in many parts of Ireland. The old birds, through the winter months, eat freely this poisoned grain, and die from the effects of it, which has been often proved to be the case. Gentlemen who wish to preserve their game should be cautious how they use vitriol, and other such poisonous ingredients, which in pickling are not at all necessary."

Before deciding that this is the chief cause of decrease, it would be requisite to know whether the practice of using "poisonous ingredients" commenced about the period that the diminution of these birds was first observed, and whether different ingredients are used for that purpose in the parts of England and Scotland where partridges abound. I know that in one extensive district in the county of Antrim, where these birds were some years ago plentiful, and are now very scarce, they have not been injured by any deleterious substance being used in the steeping of grain. With respect to the counties of Antrim and Down generally, a gentleman, well known as an agricultural chemist, informs me, that he has never known arsenic, nor anything more poisonous than a solution of sulphate of copper used in the steeping of wheat; and this, he considers, would hardly have any effect in diminishing the number of partridges.*

* Attention was lately called to this matter in England.—Doctor Henry William Fuller, of St. George's Hospital, sent the following communication to *The Lancet*:—"For some months past, in certain parts of Hampshire, partridges have been found dead in the fields, presenting a very remarkable appearance. Instead of lying prostrate on their sides, as is usually the case with dead birds, they have been found sitting with their heads erect, and their eyes open, presenting all the semblance of life. This peculiarity, which for some time had attracted considerable attention, among sportsmen in the neighbourhood, led to no practical result until about ten days ago, when a covey of ten birds having been found nestled together in this condition, two of the birds, together with the seeds taken from the crops of the remaining eight, were sent up to London for examination." By analysis, Doctor Fuller discovered considerable quantities of arsenic in the viscera of the birds; this was traced to the seed-corn in their crops. Inquiry established, that "in Hampshire, Lincolnshire, and many other parts of the country, the farmers are now in the habit of steeping their wheat in a strong solution of arsenic, previous to sowing it, with the view of preventing the ravages of the wire-worm on the seed, and of the smut on the plant when grown; that this process is found to be eminently successful, and is, therefore, daily becoming more and more generally adopted; that even now many hundreds weight of arsenic are yearly sold to agriculturists for this express purpose: that although the seed is poisonous when sown, its fruit is in no degree affected by

"Wet summers and cur dogs" are, as has been remarked, very injurious to game; but I have no reason to believe that the latter are more numerous now when partridges are scarce, than when they were plentiful. From wet and cold summers the decrease may have originated, as about the same period common swallows (*Hirundo rustica*) became scarce apparently from that cause, and continued so until the year 1847, when an increase was apparent, and in 1848, when they appeared again (at least around Belfast) in their former numbers—the first time they had done so for about fifteen years. To the fine, dry, and warm weather in the early part of the summers of the last few years, this increase is, I conclude, attributable; within which period, likewise, a slow but gradual increase of the partridge has taken place. An equal increase of the two species within the same time cannot be expected, as the partridge has many more enemies to encounter, in addition to natural causes, than the swallow has. Opposed to

the poison; that wherever this plan has been extensively carried out, pheasants and partridges have been poisoned by eating the seed, and the partridges have been almost universally found sitting in the position I have already described; and, lastly, that the men employed in sowing the poisonous seed not unfrequently present the earlier symptoms which occur in the milder cases of poisoning by arsenic." The question was then suggested, "Might not the flesh of birds so poisoned prove injurious when eaten?" Doctor Fuller cut off the breast of a bird, and gave it to a fine healthy cat. "She ate it with avidity; but in about half an hour she began to vomit, and vomited almost incessantly for nearly twelve hours, during the whole of which time she evidently suffered excessive pain. After this, nothing would induce her to eat any more partridge. I kept her without food for twenty-four hours, but in vain; she resolutely refused to touch an atom more of the bird. This being the case, I gave her some beef and milk, which she eagerly swallowed; proving, beyond doubt, that her instinct, and not her want of appetite, induced her to forego the dainty meal which had just been offered to her." Dr. Fuller also found, in every part of the flesh of the other bird, strong traces of arsenic; the bird could not have been eaten by a man without very serious consequences. "It is notorious," says Dr. Fuller, "that many of the dealers in game are supplied through the agency of poachers and others, who have a direct pecuniary interest in supplying them with the largest possible number of birds. It is certain, moreover, that if men of this sort were to find a covey of partridges in a field, dead, but fresh and in good condition, they would not hesitate to send them, with the remainder of their booty, to the poulterer; who would as certainly, without suspicion, sell them to his customers." The conclusions are, that the practice of steeping seed in arsenical solution may become matter for restrictive legislative interference, both on sanitary and medico-legal grounds."—Copied from the *Northern Whig*, Dec. 19, 1848.

A distinguished chemist, questioned by me on the subject, is of opinion that one pickle of wheat subjected to arsenic would be as injurious as four or five steeped in a solution of sulphate of copper.

this view, however, is the fact, that there was no such decrease of partridges in the south-west of Scotland, where the weather is very similar to that in the north-west of Ireland. Causes tending to the decrease of the species in the north-east of Ireland, within the period under consideration, were the increasing population of the country, and consequent diminution of farms; the law legalising the sale of game; and the constant opportunities afforded of sending it by steam-vessels to England and Scotland. Although over the north of Ireland generally the partridge suddenly decreased in numbers, even to its total disappearance from some places, and did not rally again until the last three or four seasons--during which period it has been gradually increasing, so as to be as numerous as ever in some few favourite districts--I was not prepared to anticipate the same result from the south of the island generally.* Yet from all the counties of Munster, and from Wexford, the most southern county of Leinster, I have evidence to the same effect. In some parts of Clare, Limerick, and Kerry, this species was believed to be even extinct. Mr. R. Chute remarked in 1848:—"About twenty years ago, there were a good many covies about Tralee, but they gradually diminished for the following six or eight years; and for the last ten I do not think there has been one bird. About Kenmare and Dingle, a few were always to be met with, but this year† they have sprung up in numbers about Dingle. I heard of several large covies, and shot a few birds there myself. In Wexford they decreased fully two-thirds during the time of scarcity, but within the years 1847 and 1848 became more abundant."‡ In Tipperary they greatly decreased of late years, but are on the increase again, being pretty numerous this autumn.|| "Mr. Fennell of Ballybrado considers that the occurrence of two wet Junes in succession, a few years since, destroyed a great quantity, and remarked a similar result many years before. This gentleman

* In the few parts of the counties of Antrim and Armagh, where they are now as numerous as formerly, an increase became apparent in 1844 and 1845, and has since been gradual.

† 1848.

‡ Mr. Poole.

|| 1848.

shot ninety-two brace during one season intermediate between the two periods of scarcity. Some persons imagine that the increased cultivation of clover—a crop which is cut early—has kept the numbers down considerably by the destruction of the nests. The neglect, even on preserved grounds in the south, with respect to the destruction of vermin, is much dwelt upon by sportsmen as causing a decrease of numbers. Until 1847 they were extremely scarce in the neighbourhood of Cork, but have since been found in greater quantities.* Generally speaking, two or three and in well preserved grounds five covies may be considered the most to be seen here in a day's shooting.”†

A communication received in April 1849 from Mr. George Jackson, gamekeeper to the Earl of Bantry at Glengariff, presents in some degree an exception to the foregoing, with respect to the places alluded to. He remarks,

“On Lord Bantry's estate here, there was an abundance of partridge, but in the year 1846 they nearly all disappeared in a most extraordinary manner, and the same thing occurred, I believe, through the whole of this county (Cork). I was credibly informed it did so at Lord De Freyne's, French park, co. Roscommon, and also at Mr. Cooper's, Markree castle, co. Sligo. They bred as usual; the covies were numerous, and the birds strong on the wing.

“When training the young pointers in August, I found the number of birds diminishing in the different coveys almost daily. At last many coveys had disappeared entirely; and when the shooting season came but few birds could be found, nor could I find any of them dead. Not many birds were shot that season, but on a number that were I remarked large wens on their necks and breasts. Most people here who were thought competent judges considered these to be caused by the birds feeding on the diseased potato. I thought so myself at the time; but as the disease has been every year since in the potato, while the partridges are recovering and becoming rather numerous again, I conclude we were mistaken as to the cause.

“In this very mountainous district (the country between Bantry bay and the bay of Kinnaree, nearly the whole of which is the property of Lord Bantry, or members of his family) I frequently find coveys far distant from any cultivated land. Curiosity caused me to examine what they fed on, and I found in their stomach some seeds of a coarse kind of grass indigenous to the place, some kind of green herbage, and a quantity of spiders that are numerous among the heath.”

The crop and gizzard of six out of seven partridges shot at

* 1848.

† Dr. Harvey of Cork.

different times from November to April inclusive, of which I noticed the contents, exhibited blades of grass of a rich soft kind as the chief food; the seventh (killed in mild weather) contained mosses only, of which there was a considerable quantity. In addition to grass in the others, were the fresh green-tops of different plants; in one, the tender leaves of a thistle; in two of them were a few minute seeds, and grains of oats. Fragments of stone were in all the gizzards. A sportsman informs me that he has often found "clocks" (coleopterous insects) in those killed in the mountains:—the partridge not uncommonly frequents mountain and lowland heaths contiguous to cultivated ground. It has been well observed by Mr. Poole, that "When snow lies on the ground their scratchings may be frequently seen; and it is then curious to trace their footsteps, and observe the marks of their quills where they have taken flight."

Mr. St. John, writing of the partridge, remarks, that he is confident "Most if not all granivorous birds amply repay the farmer for their food by the quantity of weeds they destroy during a great part of the year."* Another author observes:—"In alluding to the game which may be reared profitably upon a farm, partridges cannot be omitted. I do not believe they ever pull a single ear of corn from the stalk; it is only after the stubbles are cleared of the crop that they ever feed upon grain at all. In summer, insects and seeds of grasses, and in winter the leaves of weeds and coarse grasses from below the hedges, constitute their food; in the latter season they become, upon such nutriment, exceedingly fat. During the continuance of a severe frost, and when the ground has been covered to a considerable depth by snow, I have repeatedly examined the crops, both of partridges and pheasants, and found them filled with the leaves of grasses which grow by the edges of springs and water-rills that have not been frozen; and the birds, on such occasions, were in fact fatter than at any other season of the year."†

* Tour in Sutherland, vol. ii, p. 218.

† "Observations on Game and Game Laws," by J. Burn Murdoch, p. 21.

Some years ago, a partridge in good condition, and having the perfect use of its wings, was captured at an early hour of the morning in the street portion of Donegal-square, Belfast, and taken to a friend of mine, well known to be fond of birds. Its wildness denoted that the bird had not escaped from captivity. After being kept for some days in a town-yard the captive was set at liberty, when it immediately rose high into the air and flew off to the country. Its captor had no indication of what brought the bird to town; but it had probably been pursued from the country by a hawk. The friend alluded to had a partridge in confinement for some time in Belfast, which exhibited so strong a pugnacious propensity that its exploits in this way were often witnessed with much amusement. Birds of all kinds, including well-grown pullets, of the domestic fowl—both cocks and hens—were, on being placed in the inclosure with it, immediately attacked. It flew instantaneously with great force and energy against any bird introduced to its domicile, bringing the weight of its body to bear against the intruder. The strangers seemed so astonished by the attack as to become quite bewildered, and withstood it without attempting to act on the defensive. They were, however, always soon removed from the inhospitable partridge.

A sporting friend has generally observed that by far the greater number of partridges which he shot were males. On one occasion, late in the autumn, seven birds of a covey which fell to his gun (being all then seen, though others may previously have been killed,) were of that sex.

This species, as is well known, occasionally becomes white. The last one, wholly of a pure white colour, which came under my notice, was shot a few years ago, at Montalto House, county of Down.

When travelling from Liverpool to London by the mail-train ($8\frac{3}{4}$ hours) on May 7, 1846, I remarked that partridges, pheasants, hares, and rabbits, though near the train, were not in the least alarmed by it, as rooks and ring-doves were,—all of the many birds of these two species having changed their quarters to some distance. I was particularly struck by the indifference of the

rabbits, which, although within thirty yards, did not even erect their ears to listen to the sound. I have no doubt that the case was very different when the trains first started, and, that these four species which are now regardless of them, quickly fled at their approach ; but, experience having taught them that they have nothing to fear, they are now as indifferent to the loudly rushing train as to the gently passing wind. When subsequently travelling by this railway, I observed that a partridge which had been close to where the engine passed (perhaps dusting itself on the road), was obliged to move out of the way. It then flew merely a few yards up the grassy bank, and alighted within the railway inclosure.

There is a singular difference in habit between the partridge of the north of Ireland and that of the opposite portion of Scotland, as is well known to sportsmen who have shot in both countries : I have myself remarked it with some interest. An Irish covey generally springs without uttering a call, but the Scotch covey shrieks with all its might when sprung. The Scotch birds too, even where very little molested, more knowingly take care of themselves than the Irish : their watchfulness is extraordinary. Their sense of hearing, as well as of sight, must be remarkably acute. One day in the month of October, an experienced sportsman and myself sprang either twenty-four or twenty-six covies (nearly all double, or containing about two dozen of birds), in the neighbourhood of Ballantrae, when they all not only forbade a near approach, but, though we advanced as silently as possible, never admitted us into the same field with them. I have known partridges, that when sprung there called loudly like old cock birds, prove, on being shot, young birds of the year.

A sporting friend, who has had much experience in both countries, remarks, that he has more than once seen every bird of a moderate-sized covey shot in Ireland, but never saw this done in Scotland. He has bagged as many birds from a certain number of *individuals* in the former island as he has from the same number of *covies* in Scotland.

The RED-LEGGED PARTRIDGE (*Perdix rufa*) may be noticed, on

information communicated by T. W. Warren, Esq. (Feb. 3, 1844) as having been introduced a few years ago into the county of Galway by Mr. Gildear, but with what success I have not learned. Two of these birds, shot at different times in that county (one in the outskirts of the town of Galway) previous to the date just mentioned, were sent to Dublin to be preserved. A red-legged partridge in fine condition was shot near Clonmel on the 4th of February, 1849; the food observed in this bird consisted of thin greenish leaves of plants.*

THE COMMON QUAIL.

Coturnix vulgaris, Klein.

Perdix coturnix, Lath.

Tetrao „ Linn.

Is distributed pretty generally over the cultivated districts in summer; numbers also remain during the winter.

BEFORE treating of this bird as an Irish species, I shall, for the sake of comparison, give some particulars respecting it in Great Britain.

From Mr. Macgillivray's work † (1840), we learn that the quail was seen by Mr. Hepburn in East Lothian, on the 29th of May, 1839, and its call-note then heard by him for the first time. He has been informed that the species is not rare in the parishes of Dirleton and Athelstaneford. In the middle of Sept. 1833 he saw several of these birds, which had been shot in the meadows of the Clyde, in the upper ward of Lanarkshire. ‡ Sir William Jardine (1842) states, that:—"In Britain they may now be termed only an occasional visitant; the numbers of those which arrive to breed having considerably decreased, and they are to be met, with certainty, only in some of the warmer southern, or midland counties of England. Thirty years since they were tolerably common and regular in their return; and even in the south of Scotland a few broods were occasionally to be found. Mr. Macgillivray mentions its occurrence in Morayshire, and his having received a nest and eggs

* Dr. R. J. Burkitt of Waterford.

† Br. Birds, vol. iii. 699.

from Aberdeenshire. Its occurrence farther north has not been recorded. In these same districts they are now very uncertain; we have known of broods only twice, and occasionally have shot a straggler apparently on its way to the south.”* To use Mr. St. John’s words:—“The quail is sometimes killed here [Morayshire], but very rarely. I once shot a couple on the Ross-shire side of the Moray firth, but never happened to meet with one on this side, though I have heard of their being killed, and also of their having been seen in the spring time, as if they came occasionally to breed.”† The same author states that the quail appears occasionally near Dunrobin, Sutherlandshire.‡ A nest of the quail with twelve eggs was found in the summer of 1848, in a field of hay, in the parish of New Deer, Aberdeenshire. There is said to be a similar nest in the same farm every year.|| One quail is recorded to have been shot in the Orkney Islands.¶

This bird seems rather to have increased latterly in Scotland. In 1839, I was informed by a friend, who had shot regularly for upwards of twenty years over different parts of the south of Ayrshire, and particularly in the maritime districts, that he never met with one. Within that period he had heard of only two having occurred. One was seen on the shooting grounds of Duisk Lodge; the other was shot on the property of Mr. Rotch of Drumlamford, and is preserved as a bird of extraordinary rarity. In the summer of 1846, two or three brace of quails were seen about Ballantrae, and a few killed at other places within fifteen miles of that village. In 1848, I was told by Mr. William Smellie Watson, of Edinburgh, that two nests of quails were found in a meadow at Craiglockhart, near that city, in the spring of 1847. They were discovered during the mowing of the grass; in one nest were eight and in the other twelve eggs. He was told of a third nest being found at Duddingston. When in the island of Islay, in January 1849, I learned that quails are very scarce there; the keeper at Ardimersy had seen but three during nine years; all in the autumn. Another person, who had been keeper at Islay House, and has since had a farm, met with only three of these birds during a much longer

* Br. Birds, vol. iii. p. 106.

† Wild Sports of the Highlands, p. 147, ch. 18 (1846).

‡ Tour in Sutherland, vol. i. 135 (1849).

|| Rev. James Smith in “Zoologist,” November 1848.

¶ Hist. Nat. Orcadensis, p. 57 (1848).

period, and of these, two were seen together in the month of January or February.

When treating of the ptarmigan, I alluded to the singular fact of its presence on the mountain tops of Islay and Jura, and of its absence from those even of superior altitude in the north of Ireland, though of similar mineralogical structure, as in Donégal, &c. The quail, however, presents an instance of the opposite character, by its extreme rarity in Islay and the other islands, and all the parts of the mainland of Scotland nearest to Ireland, although common here. Around Port Ballantrae, on the northern coast of Antrim (that part of the latter country nearest to Islay), I was particularly struck with this difference, on hearing quails daily, during the month of June 1842, though grain is but very partially cultivated there. The whole aspect, too, of the maritime portions of the county of Antrim, as to cultivation, &c. is very similar to that of the opposite parts of Scotland.

Montagu, writing in 1802, says, with respect to England, probably in reference to the south, where he resided, that these birds are “in much less quantity than formerly.” Mr. Selby, in 1825, remarks, that “they now visit us in much fewer numbers than they formerly did, and their appearance in the midland and northern counties of England has of late years been a rare occurrence.” With reference to Swansea, in Wales, we are told, that, the “*Quail* is rarely seen hereabouts; but throughout one summer, about thirty years ago, there was a large bevy on the Townhill, and another smaller one in Gower.”*

That quails were common in this island nearly three centuries ago, is indicated in the following extract from ‘A Brief Description of Ireland made in the yeere 1589, by Robert Payne:’—“There be great store of wild swannes, cranes, phesantes, partridges, heathcocks, plouers, greene and gray, curlewes, woodcockes, rayles, *quailles*, and all other fowles much more plentiful than in England. You may buy a dosen of quailles for iii.d., a dosen of woodcockes for iii.d., and all other fowles ratable.”†

* Dillwyn. Fauna and Flora of Swansea, p. 7 (1848).

† Reprinted in Tracts relating to Ireland, published for the Irish Archæological Society: Dublin, 1841.

It is a remarkable fact, that, while during the last half century the cultivation of England has been so much extended and improved, the quail should have decreased, while, during that period it has from the same cause increased in Ireland; in which island, too, there has been a decided augmentation of late years, to the numbers, remaining during winter. In the wheat districts around Belfast, quails were always common. In a part of the country, stretching towards the mountain base, where oats had been grown in quantity, they did not appear until the introduction of wheat; but after this grain had ceased to be cultivated there, the birds continued in the district. In a letter from J. V. Stewart, Esq., dated Rockhill, Letterkenny, Feb. 3, 1837, it was remarked, that "quails are only found in the most improved lowland parts of the county Donegal; where some years since they were very rare, they are now becoming annually much more common, which is to be accounted for by the increased growth of wheat." In the year 1837, I learned, from the late T. F. Neligan, Esq. of Tralee, that "within the preceding eight or ten years the quail had become much more common in the county of Kerry, within which period cultivation had much extended." It is very singular that they should thus keep pace with the cultivation of grain, even to the north-west and south-west extremities of the island, while the opposite result prevails in Great Britain. The slovenly system of farming, unfortunately too common in Ireland, is, however, greatly in their favour, as the seed of weeds among the stubble, supplies these birds during winter and at other seasons, with abundance of food.

Although fields of grain are the quail's chief resort, clover fields in grain districts are sometimes its favourite haunt in spring and summer; meadows also, indeed, occasionally are so. In an extensive meadow district near Belfast, I one season heard them daily calling from the end of March to that of May; and my attention was attracted by the notes of numbers of them early in August, in that great district of meadow-land near Toome, over which Lough Neagh spreads its winter floods. During the latter season the quail is often met with in turnip fields.

In the winter of 1831-32, my attention was first particularly directed to the continuance, throughout the year, of the quail in Ireland, and from that period until the present there was hardly a day from November till March in which it was not exposed for sale in the shops of the game-dealers in Belfast. From that winter (1831-32) until the season of 1834-35 the numbers remaining annually increased; and during the latter, they were more numerous than had ever been previously remembered by old sportsmen. Notes on the numbers killed by a sporting relative, when walking across stubble fields direct from one bog to another in pursuit of snipes, have been furnished to me, and from them it appears that the greatest quantity seen on any day in November or December was fifteen brace, on the 10th of the latter month, $4\frac{1}{2}$ brace of which were shot on one day. They appeared generally in bebies of three or four that season;* all alluded to were seen in their summer haunts, in the county of Down, within six miles of Belfast. The same gentleman shot four brace one forenoon about the 1st of January, 1835, near Larne, in the county of Antrim; and saw many more on the same day. He never met with more quails when partridge-shooting at the commencement of the season than he did in the month of December 1834. In the winter of 1836-37, about Christmas, a person of my acquaintance shot ten brace of quails in stubble fields bordering Belfast bay, to the north of Carrickfergus. They are, however, as plentiful inland, as in maritime districts. In the letter from Mr. J. V. Stewart before referred to, that gentleman mentioned his having met with the quail at the end of January about Letterkenny; and Mr. George Bowen, of Burt, in the north of the same county (Donegal), informed me that five or six brace can easily be obtained there in the course of a day's shooting about Christmas. Mr. Knox, in his work just published on the Birds of Sussex, remarks:—"In Ireland I have found them [quails] abundant in the King's County during the winter. They

* A friend, when partridge-shooting in September, once sprang fifteen or sixteen quails from the same place.

appeared partial to backward oat-stubbles on poor swampy soils, just verging on the borders of the great red bogs. After the first flight, they generally lay well: the grand point was to drive them towards the bog, and, if possible, to scatter them over its surface. What capital sport they then afforded in combination with snipe, plover, teal, and wild ducks, the natural denizens of the swamp, which usually contributed to my bag on such occasions!" p. 169.

The following incidental notices may be added:—*Feb.* 1, 1842. The chief dealer in quails in Belfast assured me that the number of these birds purchased by him in the last three months, or throughout the winter, would average about three dozen a week; on one day five dozen were brought to him. Being fat and in high condition, they were readily sold at from 8*d.* to 1*s.* a brace. Mr. R. Ball, writing from Dublin on Feb. 24, 1845, remarked, that "great numbers of jack-snipes and quails have been for the last few days on sale here. One petty dealer who brings a basket of game occasionally for sale to the Castle, had to-day thirty-six jack-snipes and fifteen quails, and there have been many large bunches of them in dealers' shops about town." There had not been any severe weather in Ireland before or at this period.* On the 20th of Oct. 1846, a gentleman of my acquaintance shot five brace of quails within an acre of ground at Ballylessan, and bagged two or three more brace in the neighbouring fields, where they were numerous. On Christmas day that year, when there was a slight covering of snow on the ground, and severe frost had prevailed for some days previously, ten of these birds were reckoned at one view beneath a corn-stack at Mertoun:—these localities are within a few miles of Belfast. Quails were very numerous during the winter of 1846-47, in the counties of Down and Antrim; fifty or sixty of them being occasionally brought from the country in one morning to the chief game

* Montagu, writing from the south of England, remarks of quails, that—"In October they leave us, and return south, leaving some few (probably of a later brood) behind to brave the severity of our winter." To this Mr. Selby is disposed to assent. In Ireland, however, a fair proportion of adult birds of both sexes is shot throughout the winter.

dealer in Belfast. During the following winter they were very scarce, but after severe frost and snow, late in the season, some were brought to market; on the 1st of Feb. 1848, I reckoned thirty-six in that dealer's shop.* Although more quails appear to have wintered in Ireland in the comparatively mild seasons of late years than formerly, I have the testimony of a veteran sportsman to the effect, that from his having met with them in the counties of Down and Antrim every winter during the last sixty-five years, he had always looked upon them as indigenous, and not as migratory birds. Others bear witness to the same effect for half that period, and have considered them (in the Island Magee, &c.) to be as common in winter as in summer.

Over the continent of Europe, including the most southern portions, the quail is looked upon only as a summer visitant, excepting in Portugal, where it is said to be found throughout the year, and is considered more numerous in winter than in summer. If this be correct, it is a highly interesting fact, in connexion with the wintering of the species in Ireland. From its remaining permanently in the most western part of the southern portion of Continental Europe, and the most western island in a considerably higher latitude, it would seem as if the influence of the Atlantic Ocean were the predisposing cause, counteracting as it does the severity of the winter in a twofold manner:—lessening the cold of that season so much, that it can be borne by the bird, and enabling it, in consequence of the comparative absence of frost and snow, to procure abundance of food.† Colonel Sykes,

* I had three of these of average size weighed, and found them to be $3\frac{1}{2}$; $3\frac{1}{2}$ (rather more); and $3\frac{3}{4}$ oz. The crop of one was entirely filled with the seeds of weeds which grow among grain. The seeds within this crop alone weighed one ounce; nearly $\frac{1}{3}$ of the weight of the whole bird.

† The preceding remarks were made on data supplied by the Supplement to Montagu's Ornithological Dictionary, where it is stated, that—"The quail remains all the year in Portugal, and we are assured by an excellent sportsman, Captain Latham, that he thinks they are more plentiful in that country in winter than in summer." I have been informed, however, by Dr. Scouler, who spent the four winter months of 1844-45 in Lisbon and its vicinity, and occasionally accompanied sportsmen when out shooting, that quails were never met with, nor did he see any at table or in the markets. The birds killed by his companions were red-legged partridges and snipes, but not many of either species were seen. He was told that late in the spring, and

in a valuable memoir on the Quails and *Hemipodii* of India,* in which an ample acquaintance with these birds is manifested, coincides with Temminck in the opinion, that "quails emigrate for food, rather than to enjoy an equable climate;" in proof of which it is mentioned, that "the great changes of temperature in India do not influence the movements of this species, food being abundant at all seasons:"—the common quail of Europe is resident there.

In Ireland there is so little frost, that the food of the quail may generally be procured with ease, a fact so far corroborative of the view just mentioned. But I have had evidence of the effect of cold upon this species, by finding it among rushes close to the sea-side (Belfast bay) in severe frost, from which our indigenous birds were likewise suffering, and have known one on such occasions to be shot at low water, on the oozy banks of the bay, a furlong from the shore.† In the county of Wexford, quails are frequently met with in marshes of large extent.‡

The quail is generally characterized as a polygamous bird, which I cannot consider correct, at least in reference to Ireland. The universal impression, so far as I have questioned persons well acquainted with the bird, is, that it regularly pairs. Indeed, in the north, it is generally met with in pairs, not only in summer, but in winter. Mr. Poole, considering the pairing as a matter of course, from these birds having so occurred to him

in summer, quail-shooting is a favourite amusement, these birds being then very abundant on the *lizeries*, or flat alluvial grounds, bordering the shore, and constituting the islands of the Tagus.

* Transactions of the Zoological Society of London, vol. ii. ; and largely quoted in Yarrell's 'Brit. Birds.'

† Pennant mentions his having been assured "that these birds migrate out of the neighbouring inland counties, into the hundreds of Essex, in October, and continue there all the winter: if frost or snow drive them out of the stubble fields and marshes, they retreat to the sea-side, shelter themselves among the weeds, and live upon what they can pick up from the *algæ*, &c. between high and low-water mark. Our friend remarks, that the time of their appearance in Essex coincides with that of their leaving the inland counties; the same observation has been made in Hampshire."—*British Zoology*. I have not met with any allusion to this in subsequent works on British Ornithology. It would be desirable to know if such be the case at the present time.

‡ Poole.

in the county of Wexford, remarks, under date of April 11 :--
“ A quail which has through the winter frequented a meadow in my daily walk, has, I observe to-day, procured for itself a mate, but whether from the spring migration or from some neighbouring locality, as is more probable, must remain a mystery, except to the respective parties.” But the nearest approximation to proof is in the following cases. The observant gamekeeper at Glengariff (Cork) states, that in almost every instance in which he has found the young brood, the *two* old birds were with them. My friend, William Ogilby, Esq., furnishes this interesting note :--“ In walking through a grass field on my farm at Liscleen (Tyrone), about the 15th or 16th of May (1849), I suddenly flushed a quail, which rose so close to my feet that I was very nearly trampling on it. On looking down, I readily distinguished the lair in which it had been sitting, with a small heap of droppings on one side, evidently indicative that the place had been occupied for some days. But my curiosity was excited at perceiving close by (within about a foot) a dead quail, which I presume must have been its mate, and which, from its condition, I should judge to have lain there for four or five days ; during all which time it was apparent that the widowed survivor had never deserted the body. This instance of fidelity in a class of birds, of the mental characters of which we know so little, strongly attracted my attention, and I think may possibly be interesting to you in more respects than one. You will draw your own conclusion as to the value of the anecdote in its bearing on the question of the monogamous or polygamous habits of the quail. The crop of the dead bird was distended with seeds of grass mixed with a large number of *scarabæi* and other insects.”

When in Dublin, in May 1849, I saw a pair of quails at Mr. Campbell's, Duke-lane, that, in the preceding year, had produced and reared to maturity five young. The cage in which they were confined was about three feet in length, and half as much in height and depth. I saw both the old and the young birds, which were placed in separate cages, on account of their pugnacious propensities. Their call-notes, loudly uttered

from both cages, indicated from a distance their "whereabouts," and thus saved me the trouble of making any inquiry respecting it.

The call of the quail, interpreted *wet-my-foot*,* is frequently uttered from "earliest dawn to latest eve" in spring and the more genial periods of the year, and during winter also may occasionally be heard in the north of Ireland.† I have very frequently heard it in September half an hour after sunset, and listened to what seemed to be their calling and answering each other until dusk. Indeed, their notes may sometimes be heard in their ordinary haunts during the night. On more than one occasion in the summer of 1846, quails, when flying across Belfast bay by night, were heard to utter their ordinary call.

A correspondent remarks, that there is "great variety in the colour of quails' eggs, some being nearly covered with dark spots, and others almost plain." So late as the 24th of September 1834, a friend sprung one of these birds from its nest, and on the 9th or 10th of October in the same year, he met with two broods of young birds, some of which could not fly. On the 7th of October, 1845, an old quail was shot near Belfast, by John Garner, Esq., of Garnerville, and by his dog continuing to point near the place whence it sprang, three young birds, about that number of days old, were procured. One of these, together with the parent, being sent by that gentleman to the Belfast Museum, I availed myself of the opportunity of ascertaining the food they contained. The stomach of the parent was chiefly filled with the seeds of the reed (*Arundo phragmitis*), together with fragments of stone:—in the young there were none of these seeds, but

* In some continental countries, particularly in Holland, I have been surprised to see poor quails imprisoned in miserably small cages, and hung outside the windows like singing birds, apparently for their music, consisting only of the above three notes. True, in London they are still more cruelly treated, though for a different purpose;—that of being fattened for the table. They are granted only sufficient room to enable them to stand up and feed.

† Yarrell remarks, that "they are said to lose their voice when the breeding season is over, as they are not heard to exercise their notes afterwards.‡

‡ B. B. vol. ii. 402, 2nd edit.

instead the comparatively smaller ones of rushes and *Atriplex patula*; no insects were found.

On examination of the food contained in about thirty quails shot at various times and places during winter and early spring, seven-eighths of it was found to consist of the seeds of weeds, such as the different species of plantain (*Plantago*), persicaria (*Polygonum*, *P. minus*, &c.), dock (*Rumex*), wild vetch (*Vicia*, &c.), chickweed (*Stellaria*, &c.). The crop of one bird being filled with the seeds of *Stellaria media*, I reckoned a certain number of them; and judging of the rest accordingly found that there could not be less in it than 3,500.

The last meal that one epicure quail had indulged in consisted wholly of the nutritious slug, *Limax agrestis*, eleven of which had been sacrificed to his appetite. This was the only instance in which I ever found the remains of animal life in the stomach of the quail; but here again, as in the destruction of the seeds of weeds, we find this bird benefitting the farmer. The only other matter consisted, in two instances, of large or garden peas; in one or two others, of green vegetable matter, and a few grains of wheat; all of the gizzards contained sand or fragments of stone.

In the month of August I have met with quails in Italy. Some that were served up at table at Valetta (Malta) on the 19th of April, 1841, and likewise a quantity of them, hawked about the streets, had been brought from Naples. I was told that a few of these birds remain permanently in the island of Malta. On the passage of H.M.S. Beacon thence to the Morea, occupying from the 21st to the 27th of April, a single quail only alighted on the vessel. The great body of them had previously crossed the Mediterranean. On the 29th of that month I sprang a brace near Navarino. Mr. Wilkinson, jun. of Syra, son of the well known and highly esteemed British consul in that island, informed me that quails are not seen on their autumnal migration at Syra when the wind is southerly, but when it is north-east they alight in great numbers from the 10th to the 30th of September. Their coming is always announced by the call of the heron, which

accompanies them throughout the period of their migration. This bird is described to be "reddish-brown on the back, cream-coloured elsewhere," and is probably the Squacco heron (*Ardea comata*). They never remain longer than one day. Mr. Wilkinson has been told by friends resident at Alexandria, that the earliest arrival of the quail there is about the 20th of September.

THE LITTLE BUSTARD.

Otis tetrax, Linn.

Has at least once visited this island.

IN the 'Proceedings of the Zoological Society of London for 1835' (p. 79), I noticed, on the authority of Mr. W. S. Wall, (an intelligent bird-preserve, well acquainted with Bewick's faithful portraits of British birds), that a little bustard, sent to him by Mr. Reside to be stuffed, had been shot by that gentleman in the county of Wicklow on the 23rd of August, 1833 :—another was seen at the same time. I subsequently learned from Mr. Haffield of Dublin, who was present on the occasion, that they were associated with golden plover, in the bog of Killough, adjoining Powerscourt demesne, and about five miles from the sea. They proved to be less wary than the plover. The survivor remained for some time about the locality after its companion had been killed. The singularity of its cry was particularly remarked by my informant.

This species is but an occasional visitant to England, and has occurred only once in Scotland.*

THE GREAT BUSTARD, *Otis tarda*, Linn., was enumerated by Smith (1749) as one of the birds of the county of Cork. It is long since extinct. One is said to have been shot in Scotland in 1803 ; in England the species probably still exists. Mr. Yarrell's work contains full particulars respecting it.

* Jardine.

The Birds of the order RASORES, *indigenous* to Great Britain and not to Ireland, are the

Stock Dove, *Columba oenas*,

{ a species confined to the midland and eastern counties of England.

Black Grouse, *Tetrao tetrix*,
Ptarmigan, *Tetrao lagopus*,

{ already commented on.

In addition to these are the

Passenger Pigeon, *Columba migratoria*,

{ obtained once or twice in Scotland.

Red-legged Partridge, *Perdix rufa*,

{ which *may have* visited the south of England in a wild state; but which *has been* introduced to that country and also to Ireland.

Barbary Partridge, *Perdix petrosa*,

{ included in the British Fauna, from a single specimen obtained in Leicestershire.

Virginian Colin, Partridge or Quail, *Ortyx Virginiana*,

{ introduced to England from North America. Montagu, in the Supplement to his Ornithological Dictionary, published in 1813, mentions that "the late General Gabbitt liberated many on his estates in Ireland, but in two years the breed was lost."* I have known these birds to live for a considerable time in aviaries exposed to the weather, in and about Belfast.

Andalusian Hemipode, *Hemipodius tachydromus*, Temm.

{ One of these birds was shot at the end of October 1844, and another a few days afterwards in the neighbourhood of Chipping Norton, Oxon. This species inhabits the south of Europe and North Africa.

Ruffed Bustard, *Otis Macqueenii*,
Otis houbara, Gmel.?

{ One was obtained in Lincolnshire, Oct. 7, 1847. The species is a native of Persia and Western Asia.†

No species of this Order unknown to Great Britain can be named with certainty as having been obtained in Ireland.

* Noticed in article on "Grosbeak, white-winged."

† *Zoologist*, 1848, p. 2065 and 2146.

BIRDS OF IRELAND.



ORDER, GRALLATORES.

WADING BIRDS.



ORDER, GRALLATORES.

(*Wading Birds.*)

THE COLLARED PRATINCOLE.

Glareola pratincola, Linn. (sp.)

Hirundo „ „

Has been once obtained in Ireland ;

A SPECIMEN having been shot at Castlefreke, the seat of Lord Carbery, in the county of Cork, (by the Rev. Joseph Stopford,) in the month of October, a few years previous to 1843, in which latter year the circumstance was first announced.* Un fortunately it was not preserved.

Five instances of the occurrence of this bird in England, and one instance of its being met with in Scotland—in the Isle of Unst—are on record. It appeared singly, except on one occasion, when two were seen together.†

The pratincole is little known in Europe, excepting in the warmer and more southern portions of that continent. It is resident in Northern Africa, and throughout a great part of Central Asia.

* Dr. J. R. Harvey in Fauna of Cork, p. 11.

† Yarrell, Brit. Birds, vol. ii, p. 441, 2nd. edit.

THE GREAT PLOVER.

Norfolk Plover.

Edicnemus crepitans, Temm.**Charadrius edicnemus*, Linn.

Is known only as an extremely rare visitant.

THE Great Plover is one of those species whose geographical distribution is very interesting. It is a regular summer visitant to England, but common only in the eastern and south-eastern counties, inclusive of Hampshire. Thence westward and northward it becomes rare, and has not been noticed farther than Yorkshire in the latter direction.† Consequently, we should expect that very few would visit Ireland, and that these would appear in the more southern rather than in the opposite portion of the island. Such is the fact; the few that have yet been met with, having occurred from Dublin southward.

Dr. J. D. Marshall, in the Magazine of Natural History (vol. ii. p. 395), recorded a specimen, which was very much emaciated, as having been shot at Clontarf, near Dublin, on the 27th Jan. 1829. The bird came under that gentleman's inspection just after being killed. A very fine one (now preserved in the museum of the Natural History Society of Dublin) was shot at Brownstown, near Tramore, county of Waterford, about the 1st of March, 1840. It is stated, in the "Fauna of Cork," p. 11, that "Richard D. Parker, Esq. (of Sunday's Well, Cork) met with two of these 'large solitary plover' on the wild mountains of Iveragh, county of Kerry, in August 1842. He had full opportunity of observing them, and remarked that they seemed fond

* In Smith's History of Cork the following note appears:—"The stone curlew (*Edicnemus*).—Its feathers and feet resemble those of a bustard, and its cry is something like that of a green plover: we have it on our shores." In Tighe's History of the County of Kilkenny, it is remarked, that "the *Charadrius edicnemus* frequents the lower part of Waterford harbour; this bird, sometimes called the Norfolk plover, and sometimes stone curlew, is rather scarce," (p. 156.) The bird referred to in these extracts, can hardly be considered the *Æ. crepitans*.

† Yarrell, Brit. Birds, vol. ii. p. 437.

of perching on the rough knolls of the mountain. They allowed him to approach within ten or twelve yards, when they rose and uttered a shrill whistle." This gentleman was familiar with the appearance of the great plover, from having seen it shot in Kent. In a communication to the "Zoologist" for March 1845, p. 876, Mr. J. Poole, of Growtown, near Wexford, stated, under date of December 8, 1844, that he "had lately [Dec. 4] an opportunity of examining a recent specimen of the Norfolk plover which had been shot in [a bog in] that vicinity." In the same page, one of these birds is mentioned by Mr. E. H. Rodd, of Penzance, Cornwall, as having been brought to that town on the 24th Dec. 1844. It is remarked that the several instances known to the writer, of the occurrence of the species in the Land's End district, were all in the middle of winter.

A great plover in the garden of the Zoological Society, Regent's Park, London, interested me much during different visits, in May 1849, by remaining, fixed as a statue, so long as I had patience to return its gaze, in whatever attitude it happened to be, when my eye first rested on its organ of vision. I tried it from the different sides of the aviary, and found its performance the same from all. The earnestly fixed gaze of its large and prominent dark eye had a very singular effect.

THE GOLDEN PLOVER.*

Charadrius pluvialis, Linn.

This beautifully marked and gracefully formed species is common in suitable localities throughout Ireland, and is permanently resident.

A VAST increase to the number of our indigenous birds, however, takes place towards the end of autumn. The flocks which then arrive remain during winter, and depart northward late in spring.†

* Often called grey plover.

† The golden plover was remarked by my late friend George Matthews, Esq., to be plentiful during summer along the coast of Norway: he did not meet with it there in winter. At the latter season, it is said to be most abundant in the Orkney Islands. Hist. Nat. Orcad., p. 58 (1848).

For several years I particularly noted down the period of the arrival of the migratory flocks to the county Antrim mountains, near Belfast, where they make their appearance in September;—sometimes early in the month. At this period their mournful cry is particularly pleasing, when heard, as it occasionally is, at the same time with the loud gallant crowing of the grouse, and the tender bleating of the snipe. Here, until of late years, they remained, amply provided with food, in the marshy and boggy portions of the mountains until spring, unless the severity of frost or snow drove them to the low-lying humid tracts, or to the sea-shore,—a circumstance of unfrequent occurrence in our equable climate.

Within the last very few years, when much attention has been given to the draining of our mountain bogs, a change has taken place with regard to this bird, which frequents the sea-shore more than formerly. It sometimes now appears in Belfast bay, in mild as well as severe weather, and very early in the autumn. On the 29th August, 1841, a few were obtained there; and on the 30th of the same month, in 1843, a flock of from 150 to 200 birds was seen, and continued to appear, either separated into small parties or all together, until the 1st November, after which no notice was taken of them. Throughout September, 1844, they frequented the bay. On the 27th of that month eighteen were killed at one shot, from a flock of about seventy or eighty. In winter, of course, many more are obtained. The greatest quantity I have known to be killed there at one discharge, and bagged, was 108, which, on the 22nd of January 1848, fell to the swivel-gun of a wild-fowl shooter. A number more were killed and wounded, several of which were picked up by other persons. On the oozy banks of the bay, these birds have abundance of food at all seasons, consisting (as I have repeatedly had proof by dissection) chiefly of small testaceous mollusca of the genera *Rissoa*, *Littorina*, and *Lacuna*, together with the fry of the common mussel (*Mytilus edulis*). On looking to the stomachs of birds killed inland at different times, they were found to contain insect and vegetable food of various kinds, together with earth-worms.

According to information derived, in the winter of 1848-49, from two intelligent wild-fowl shooters, golden plover were very numerous in Belfast bay, from twenty-four to fifteen years ago, during the frost and snow of winter; but at such times only. From the latter period until 1841-42, or during seven years, they were scarce under all circumstances of weather,—sometimes hardly one to be seen in a winter. From the last-named date to the present they have been numerous, appearing early in the autumn, and remaining until spring.

Similar details cannot be given respecting Strangford lough; but during a week in Feb. 1846, when the weather was remarkably mild, golden plover were in abundance there. In the first week of March 1847, several flocks, consisting altogether of about 300 birds, were daily observed. The weather then, and for some time previously, had been fine; no frost for a long time preceding.

Mr. Poole, writing from the county of Wexford, remarks, that “the golden plover is an irregular winter visitant to the lowlands, coming only when hard frost compels it to leave its highland haunts. When undisturbed, these birds always arrange themselves in flight in the form of a triangle; but if frightened they desert that order, and fly a long way [in single file] without joining again. In feeding on fallow-ground they prefer the furrows to the tops of the ridges, and thus unconsciously form themselves into rank resembling an army drawn up in order of battle. They are tame birds, and, when unaccompanied by lapwings, easily approached. Some birds, shot in the evening, had their stomachs fully distended with earth-worms, on which and beetles they feed.”

In Great Britain it would seem that the golden plover does not await severity of weather to betake itself to the low grounds. Mr. Selby, writing from Northumberland, observes that “towards the end of August these birds begin to leave the moors (having then congregated in large flocks), and descend to the fallows and newly sown wheat-fields, where an abundance of their favourite food can be readily obtained. * * * In these haunts they continue till severe weather approaches, when they either move

nearer to the coast or migrate to the southern parts of the kingdom.”* Sir Wm. Jardine, too, remarks, that this species is “on the coasts generally in vast flocks during winter.”†

To give some idea of the numbers (though not great), &c., of golden plover frequenting the Belfast mountains, one note may be introduced:—“*Oct.* 19, 1833.—During a botanical walk to-day over the mountains and bogs, the golden plover was met with five times: a few were on the top of Lyle hill, a dry pasture intermixed with heath; about twenty-five were associated with as many lap-wings in a bog from which both species rose at the same moment, and kept together for some time on wing, but eventually separated on the heath near the top of a mountain, where a large flock of golden plover had already taken their ‘stand;’‡ at the base of Aughnabrack about thirty were seen; and on the hill called the Sheepheads, not less than a hundred appeared: all these were distinct flocks. Three of these flocks admitted my approach within about thirty paces, though, after being persecuted, they become very wild. Their tameness thus early in the season is attributable to their being as yet undisturbed or shot at by sportsmen, who rarely visit this quarter except for snipe-shooting, which has not yet well commenced.”

There is often apparently an increase to the number of our birds in these localities as winter advances, caused probably by the severity of weather northwards. In the months of December and January, in different years, I have observed large flocks; as on the 5th of December, 1831, when three, consisting each of about two hundred birds, appeared.

The author of “*Wild Sports of the West*,” remarks, with reference to the county of Mayo—winter coming on with giant strides—that “Gray [golden] plover must migrate in thousands hither. Nothing else could account for the immense flocks that have been seen, and will continue, as I am informed, to arrive.

* *Illus. Brit. Orn.*, vol. ii, p. 234.

† *Brit. Birds*, vol. iii, p. 291.

‡ This plover and the lapwing have been killed at the same shot in severe weather at Cloughwater (Antrim), where they have frequently been observed feeding in company; fieldfares and starlings being also occasionally associated with them.

The shores and moors are everywhere crowded with them;* and within a hundred yards of the lodge, Henessey, with two barrels, killed seven couple and a half last evening. The bent-banks are their favourite fixture; and I have never crossed them of late without finding at least one *stand*. I have seen three hundred of these birds thus congregated."

The same author continues:—"There is, in shooting plover, a common remark made by sportsmen, that the *second* is always the most productive barrel. The rapidity with which they vary their position when on the ground seldom admits of a grand combination for a sitting, or rather a running, shot. But when on the wing their mode of flight is most favourable for permitting the shot to tell; and it is by no means unusual to bring down a number. When disturbed they frequently wheel back directly above the fowler, and offer a tempting mark, if he should have a barrel in reserve; and even when too high for the shot to take effect I have often thrown away a random fire; for the plover, on hearing the report, directly make a sweep downwards on the wing, and I have by this means brought them within range of the second barrel."—(p. 292, edit. 1843.)

This singular habit the golden plover shares with others of its

* The mention of *large* flocks upon the *moors* renders it evident that the Golden and not the "Gray" plover is meant: the latter species is a shore bird, and, besides, does not appear in flocks such as those described. It is surprising that intelligent men will not make themselves acquainted with the correct names of the birds on which they so pleasantly descant. For a long period we have had three species of plover distinguished as Green (Lapwing), Golden, and Grey, each deriving the name from its actual colour, yet are they commonly confounded together. In the 'British Naturalist' (vol. ii. p. 266) the Golden is treated of at length under the name of Green plover; and at p. 271, the following remarks appear:—"There are few birds of which the ignonegenes are more perplexing than the plover; it is in fact almost the British chameleon. One sees it in one light, and it is 'green;' a second takes a greater fancy to the yellow spots, and it is 'golden;' a third comes upon it in the winter; the green and the gold have both faded, and, lo! it is 'grey.'" Here we have three distinct species, ranked by some systematic authors under as many genera, confounded together by the British Naturalist!

When the golden plover, either from youth or seasonable change of plumage, does not exhibit its golden drops, the unaltered characters of structure have only to be looked to; the absence of the hind toe, and the comparatively small and delicate bill at once distinguish it from the grey plover. The white appearance of the upper tail coverts of the latter species, as seen when the bird flies, distinguishes it from the golden plover. Shooters recognize it by this character alone, when its distinctive call-note is not uttered. Close examination, however, shows that these coverts are not wholly white.

congeners. No matter how rapidly the flock may be speeding onwards when fired at, it is certain instantly to sweep downwards, and in such a manner that I can readily imagine a tyro, after having shot at the species for the first time, impressed for a moment with the idea that the whole flock is falling to his barrel.

On this subject a note has been supplied by a sporting friend, to whom the preceding remarks were shown:—"In the winter of 1847 I went to boggy meadows, in the neighbourhood of Belfast, for the purpose of shooting golden plover, and took with me a young lad, who had never before been on such an expedition. When returning home, a flock, consisting of about fifty of those birds, flew overhead beyond reach of the shot; but as I despaired of getting nearer to them, I fired at the flock, on which they instantly swept down, almost perpendicularly, within three or four yards of the ground. My companion ran forward in the greatest delight, to pick up, as he expected, the entire flock, when, to his utter amazement, they all resumed their former mode of flight, and quickly disappeared in the distance." Flocks of lapwings, when fired at, often droop more vertically than the golden plover, and approach the ground more nearly—within a very few feet.

The period at which the under portions of the golden plover become black is differently stated by the best practical ornithologists. Montagu remarks, that this bird "begins to change its plumage early in the year; a specimen, shot on the 10th of March, in Devonshire, had the whole under parts mixed black and white from the chin to the vent."* Mr. Selby observes, that "towards the end of March, or the beginning of April, when the impulse of nature excites them, the flocks, which during the autumn and winter had remained united, begin to separate into smaller parties, and retire to the uncultivated grounds of the northern counties of England, and to the Highlands of Scotland, where they break into pairs, and prepare to breed. At this period the vernal moult commences, and a remarkable change of plumage is soon perceptible, the birds being fully clad in their nuptial garb by the end of May," (p. 232.) It is stated, by Sir William

* Supplement to Orn. Dict.

Jardine, that "the breeding plumage is altered almost immediately after the station [for breeding] has been fixed upon." In the range of county Antrim mountains eastward of Belfast, where the golden plover has chiefly come under my own observation, the black plumage appears when the bird is congregated in the greatest numbers, several weeks before taking its departure for more northern breeding haunts, which it generally does towards the end of April, though known to remain until the 12th of May. Here they have come in flocks during spring to a large meadow before a cabin, within range of which they have been enticed by an imitation of their call, and shot from the door. On the 17th of April, 1826, I saw, on the Black Mountain and Devis, many hundreds of these birds, all as they swept overhead exhibiting the black under plumage. A brace which I shot were in perfect summer garb. On the 14th of April, 1832, a similar instance occurred. Several, shot in the bay on the 27th of February 1836, displayed the black under plumage, and one, killed on the 20th of February 1844, was mottled with black and white; another, on the 1st of February 1845, had a number of black feathers on the belly; but there only,—the summer, not having yet wholly taken the place of the winter, plumage. The preceding are the only instances in which I examined the birds with reference to the point in question. Of six, however, killed in the first week of March 1847, one was in full winter plumage; a second nearly in complete summer garb; the remainder exhibiting black feathers mixed with white, or in the middle stage between that of the two seasons. If the birds really display their nuptial dress at an earlier period in Devonshire and the north of Ireland, than in the counties of Northumberland and Dumfries, we may attribute the circumstance to the superior mildness of the climate in those quarters.

The golden plover is spoken of by one author as "migrating from the southern to the northern parts of the kingdom at the approach of the breeding season;*" and another observes, "it does not appear that it breeds much to the south of a

* Jenyns.

boundary formed by the river Tyne.”* The most recent work on British ornithology particularizes “the Cheviot Hills and other high ground of the Border Counties in the north of England,”† as the most southern breeding haunts of the species in Great Britain. The whole of Ireland, except a small portion of the extreme north, is southward of that latitude; yet in suitable localities throughout the island, to the county of Kerry inclusive, the golden plover nidifies. It is well remarked by Mr. Hewitson to be “a very watchful bird, and usually discovers itself long before you approach it, by its clear and plaintive whistle, which may be heard at a great distance, and is very deceptive. Upon hearing it when in search of their eggs, I have frequently expected to see the bird close beside me: and, after anxiously searching for it with my eyes all around, have discovered it perched at a distance of three or four hundred yards, upon some hillock or rising ground, on which it mostly takes its stand.”‡

I have met with this bird in its breeding haunts on the summits of some of our most lofty mountains, as well as in moist, heathy tracts little elevated above the sea, and in all intermediate situations as to elevation. On the 30th of June, 1832, a pair came under my notice on the summit of Muckish mountain (Donegal), about 2,200 feet in height, where the nest was placed in a moist spot with little cover. During the same excursion the species was met with commonly in the wild bogs of that county. On some mountains in the county of Londonderry a sporting friend observed these birds about their breeding haunts, as well as in small flocks (perhaps a score of birds together), when grouse-shooting there from the 20th to the 30th of August, 1833. While passing over the wild mountain tract covered with heath, between Cushendall and Ballycastle (Antrim), on the 7th June, 1834, we were several times attracted by the mournful note of the golden plover. The first that appeared was perched (according to the habit of the species at this season), on a little height, giving forth his cry. He was within twenty paces of us and

* Selby.

† Yarrell.

‡ Egg's Brit. Birds, p. 249.

our vehicle on the road; and, though we stopped for some minutes to admire him, he, nothing daunted, retained his ground, and continued uttering the call from the same spot, so long as we were within sight and hearing. Great numbers nidify in the wilder parts of the county Antrim. During a tour towards the end of this month, in the wilds of Connaught, we saw many of these birds on the wild low-lying bog near Polraney, and in the low tracts of the island of Achil, as well as near the summit of the lofty mountain of Nephin (2,640 feet in height). On the top of Lughnaquilla, the highest of the Wicklow mountains (above 3,000 feet), one was observed by a scientific friend on the 7th of July, 1836. Mr. Davis observes, that golden plover build on the bare, exposed sides or tops of the mountains of Tipperary. Although he obtained the eggs fresh from two nests on the 1st of May, 1841), he remarks, that they are extremely difficult to be discovered. The bird itself is noticed as easily approached at this season. Mr. Poole has met with them in some numbers during summer amid the large tracts of peat moss on the summits of the lofty Comeragh mountains (Waterford), but was unable to find one of their nests. They breed commonly in the county of Kerry.* Very soon after the breeding season our native birds gather into flocks (on the 12th of August I have seen forty together), and delight us when admitting of our near approach, as they then do, on the green pastoral hills, or on the verdurous spots among the heath, to which they are so partial.

The mournful note of the golden plover, during the anxious period of the breeding season, has been alluded to; but at other times there is a wild life in its cry which is quite inspiring:

“ And in the plover’s shrilly strain
The signal whistle’s heard again.†”

* Mr. T. F. Neligan.

† Lady of the Lake, Canto V. Stanza XI. This couplet, applicable to the present bird, is misappropriated to the great plover, in an extract copied into Yarell’s work (vol. ii. p. 438, 2nd edit.) The species being unknown in Scotland cannot, of course, be alluded to in a poem so correctly and admirably descriptive of Highland scenery and its adjuncts as Scott’s *Lady of the Lake*.

Burns, indeed, tells us that he could “never hear the loud solitary whistle of the curlew in a summer noon, or the wild mixing cadence of a troop of grey [golden] plover, in an autumnal morning, without feeling an elevation of soul, like the enthusiasm of devotion or poetry.”

From Burns, the transition to Scotland, and especially to Ayrshire, is natural! When grouse-shooting near Ballantrae, in this county, on the 12th of August, 1839, we met with a small flock of golden plover in their breeding ground. On the 16th of the month I saw several small flocks, and remarked, as I had often done before, how much more easy of approach this species is during rain (of which there had been a good deal that day) than at other times; but for the dogs, I should twice or thrice have been within shot of them on the ground. On the 13th or 14th, which were fine, I could not, though the birds were much fewer in number, get within “two or three shots” of them. So much for the effect of the rain, to which, in consequence of the golden plover bearing the trivial or specific name of *pluvialis*, some authors have imagined it to be partial. Its spirit, instead, droops under rain like that of the barn-door fowl, so faithfully depicted by Washington Irving in his wet Sunday at an inn.* When

* Mr. Yarrell remarks, but on what authority is not stated, that “the French term *pluvier*, is said to have been applied to the plover—‘*Pour ce qu’on le prend mieux en temps pluvieux qu’un nulle autre saison*;’”—for the same reason the name *pluvialis* may have been bestowed—and most correctly—on the golden plover.

A note on the effect of rain on some other birds may here be given:—*July 28, 1838.* When taking shelter from heavy rain, under trees bordering Belfast bay, I observed that the lapwings were at first stationary, not attempting to feed; but towards the end of it they commenced feeding, perhaps in consequence of victims being driven to the surface. Several herons which were in view ceased looking for prey (which they had been doing just before it commenced), and evinced their discontent by their shapeless bodily appearance and their neck being shortened to the utmost. Dunlins continued to feed busily during the mere “heavy rain;” though when it poured down tremendously they could not remain on the ground or beach, but kept flying about in small flocks. When a shore-shooter myself, during two or three autumns (now many years ago), I remarked, what was indeed well known to others, that the *Grallatores* were much more easy of approach during rain than at other times. When the morning had been very wet, and the rain over by noon, the dunlins, for the remainder of the day, though a perfect calm, kept in flocks of singular density;—as close together as they could possibly fly. On questioning an intelligent shooter on the subject, it was stated that he would even prefer a wet day in autumn for shooting to a snowy one in winter, especially for the knot (*Tringa*

sporting in the latter half of October 1849, on the high mountains about Meggarnie Castle, Perthshire, we occasionally met with flocks of golden plover, and killed some ; but their numbers were so small, compared with those in the Belfast mountains at the same period of the year, that I looked upon them merely as birds bred in the district. When grouse-shooting over the very extensive moor of Aberardær in Inverness-shire, possessing every variety of ground, I was surprised never to meet with the golden plover during the month of September 1842. A flock, however, was seen by one of our party about the 20th of the month. I saw the species commonly in Islay during January 1849, and was told that numbers breed there.

The third volume of the 'Ornithological Biography' contains a very interesting account of the American and, at the same time, of the Scottish golden plover, from the respective observations of Audubon and Macgillivray. These birds, described there as identical, are now generally considered by ornithologists to be distinct species.

THE DOTTEREL.

Charadrius morinellus, Linn.

Is very rarely met with in this island ;

THOUGH a regular summer visitant to Great Britain ; breeding annually on the lofty mountain summits about the English lakes and in different parts of Scotland. In England, however, it " does not seem to go in any numbers far to the westward * * * has not been seen more than once or twice in Cornwall, and only occasionally in Devonshire and Dorsetshire.*

The earliest notice of the occurrence of the dotterel in Ireland appeared in the "Zoological Proceedings" for 1834, where I mentioned one which had been shot on a high hill at Finnebrogue, near Downpatrick, a few years previously (it was believed in the

Canutus) and dunlin. In a wet autumnal day (but never in winter), he has frequently driven small flocks of the latter species before him, until they, united, formed a flock which he thought worthy to receive his charge.

* Yarrell, B. B. vol. ii. p. 455, 2nd edit.

month of November). I saw the specimen in the house of Mr. Reid, at Ballygowan Bridge, in the spring of that year, and was told that two others were in company with it when killed. Mr. R. Davis, jun. of Clonmel, has informed me that he obtained a dotterel, which was shot on the summit of the high mountain, Sliev-na-mon, about the 24th of June, 1835, in company with golden plover. That gentleman himself ascended the mountain on the 18th of August, and saw at some little distance two birds which he believed to be dotterels: he imagined that the species might be breeding there. He subsequently favoured me with the examination of the skin of one shot in another locality—on the mountains in the “Liberties of Clonmel” on the 24th of August, 1840: it was in a state of moult, and had lost many feathers; but sufficient remained to prove its being a male, and at least one year old. On the 18th of August, 1841, two of these birds, believed to be an old and a young one, were seen by my correspondent hanging in a cook’s shop in Clonmel. Although positive information could not be obtained respecting them, he had little doubt of their having been shot near the town. The preceding information leads to the belief that the dotterel may, in very limited numbers, annually migrate to the elevated mountains of the county of Tipperary to breed. If so, they are by far its most southern breeding haunts in the British islands.

A gentleman, to whom the species is well known, has assured me that he saw four dotterels (of which he shot one) about the middle of August, 1841, in a field bordering Belfast bay, at Garnerville. About the end of September 1844, one was obtained in a fallow field a few miles to the west of Cork.* Early in April 1848 a flock of about twenty dotterels appeared in a ploughed field in the Ards near Ballywalter (Down). Stones were several times thrown at them, which they regarded no more than by taking wing to fly to a very short distance. As they proved so tame, and were remarked by Mr. James Rankin, who was present, to be of a species unknown in the district, he went

* Dr. Harvey in Fauna of Cork, Preface, p. iv.

for his gun, and on his return killed three of them at a shot. One, being eaten, sufficed by its very delicate flavour to show that in this respect the dotterel is not estimated too highly. The others were preserved, and have been kindly submitted to my inspection. The flock was seen only on the occasion mentioned. This is the only instance at present known to me of the dotterel's visiting Ireland on its spring passage northward; and it is interesting to observe that in so doing it touched at the Ards, the most eastern part of the entire coast.

Part of the eastern coast of Scotland is annually visited by dotterels on their vernal migration. An intelligent gamekeeper has informed me that when he was living, some years ago, in East Lothian, these birds made their appearance regularly every April at the time that lapwings' eggs are laid; the date was not remembered. The ploughed or fallow ground between Dirleton and Gulan Links, and about half a mile to the north of the former place, was frequented by them in small flocks, like those of golden plover. About a hundred birds altogether would be seen in a day. He has killed six brace in a forenoon. They were never tame, but as wild on all occasions as golden plover commonly are. They remained only three or four days, but (as he remarks) his persecution may have driven them off earlier than they would otherwise have gone. A pair of dotterel, taken in the Lammermuir hills in May 1848, were kindly sent to me by William Smellie Watson, Esq. of Edinburgh.

The statement lately published in the *Historia Naturalis Orcadensis* (1848), that this bird makes its appearance in September and October, remains during winter, and leaves in spring for more northern regions, p. 58, is very remarkable; the dotterel having always (so far as I am aware) been considered only a summer visitant to any portion of the British Islands.

THE RINGED PLOVER.

Ringed Dotterel.

Charadrius hiaticula, Linn.

Is common at all seasons, except summer, in small flocks around the sandy or gravelly shores ;—where also a limited number annually breed.

NOWHERE has this handsomely marked bird appeared to me so interesting as about the extensive tracts of sand hills, which, assuming the form of a tempest-tost ocean, bound long stretches of sea-coast of the same nature. Though their only vegetation consists of occasional tufts of the sea reed (*Ammophila arundinacea*, Host.) or the upright lyme-grass (*Elymus arenarius*, Linn.), whose glaucous or bluish-green leaves have such a peculiar aspect and fine effect in connexion with the richly toned sand, this bird has often its nest amid them, and attracts us by manoeuvres similar to those of the lapwing to withdraw attention from its young.

About the gravelly shore of the Great Copeland Island, off the coast of Down, I remarked (11th and 12th June 1827) that numbers of these birds were breeding, as I subsequently did, about the islets of Strangford lough.* Of their breeding generally around the Irish coast, I have no doubt, from the circumstance of my meeting with them paired in summer at all suitable localities. On the borders of Dublin Bay, the coast of Wexford,† the sea-shore adjacent to Youghal, that of Bantry Bay, &c., this

* June 20, 1832. We shot a young bird of the year here, which was almost full adult size ; and likewise found a nest with eggs. On the 25th June, 1836, a nest with eggs was observed. In the same month of 1846 I remarked several pair at islets not previously visited. During the first week of March, 1847, these birds were observed to be partially paired here. Mr. J. R. Garrett, when visiting the shores and islands of this lough, on the 3rd of June, 1849, found that these birds had bred and were breeding in all quarters. He saw at least twenty of their nests, and procured a dozen of their eggs. On the 6th of the same month he saw, on other islands of the lough, a number of their nests, three of which only, then contained eggs.

† Mr. Poole has found the eggs here on the 6th of May, where "they are either laid on the sand or in small nests formed of dried plants."

bird is stated to breed. The best observations known to me, on the habits of the ringed plover, having been made by James R. Garrett, Esq., I have, through his kindness, the advantage of using them here. His remarks are as follow :—

“ During the summer of 1845 I paid particular attention to the habits of ringed dotterels at the Kinnegar, one of their breeding haunts in Belfast Bay. After many ineffectual searches, I discovered, on the 20th May, two of their eggs placed in a slight hollow amongst the sand and broken shells which covered the beach at a short distance above high-water mark, and from which the eggs were scarcely distinguishable. I took one of these, and after carrying it for nearly an hour in my hand, was not a little surprised to hear a cry proceeding from it, precisely resembling the summer call of the parent birds, but so faint as to be barely audible. Being unable to restore the egg to the nest, I broke the shell, already chipped. The young bird was not sufficiently advanced to be able to stand erect, but it lived upwards of an hour, frequently repeating its cry. On the 21st, I revisited the nest, and found the beak of the remaining young bird protruding through the shell. Next day, the nest was empty, and I observed the larger end of the egg-shell at a short distance from it. The two parent birds showed great anxiety, flying about, and using various artifices to decoy me from the spot. They continued to repeat their plaintive cry so long as I remained in the vicinity.

“ On the 21st of the same month I found four eggs deposited by another of these birds on the bare road leading through a gravel-pit at a short distance from the nest above mentioned, and on the 18th of June I discovered a second set of four eggs in the same neighbourhood, but placed on the stony beach near high-water mark. I took one egg from the latter nest on the 18th, and another on the 19th. On the 30th, one of the young birds was excluded, and lay with its breast and beak close to the stones, beside the unhatched egg. On the 1st of July, the young bird and egg had both disappeared, and the two parent birds were keeping guard in precisely the same manner as the pair first alluded to.

“ Since noting the foregoing particulars, I have had several opportunities of observing the habits of this species under similar circum-

stances, both in the same locality and elsewhere, and I have in every instance remarked, that until the young were hatched the female only appeared near the eggs, and that she never uttered any cry, even when she saw me in the act of removing some of her eggs. So soon, however, as the young were excluded, both of the parents were in constant attendance, crying incessantly when there seemed to be the slightest cause for apprehension. If alarmed, when sitting on the eggs, the female invariably runs in silence for some distance from the nest, and she seldom returns to it without making various circuits on foot, running a few yards quickly, and then standing motionless for a considerable length of time.

“The easiest method of finding the nest is to watch the suspected locality before coming too close to it, and whenever the bird is observed running, to search in the direction from which she proceeds.

“The young birds, until they are able to fly, crouch as closely as possible to the ground when approached, and lie, apparently lifeless, permitting themselves to be lifted in the hand, but they run very nimbly when not apprehensive of danger.

“I have always found the eggs to be four in number (except in the instance first mentioned), and the smaller ends placed in the centre.

“Mr. Hewitson has given admirable representations of the eggs; but, so far as my observations have gone, he has fallen into an error as to the habits of these birds *whilst they have nests*. He observes—‘During the breeding season the ring dotterel is ever on the alert, and on wing long before you reach its eggs, making its circuits round you, and uttering its sweet plaintive whistle of alarm—a sure indication that you are in the near neighbourhood of its eggs or young.’* I would suggest, that the birds so observed were the parents of young broods previously hatched, and which were in the same neighbourhood as the eggs of other birds of the same species, who were silent spectators of the scene.

“It may be observed, that the instinct which induces silence on the part of the female during incubation, is not peculiar to this species, Mr. Selby having recorded its existence in the common sand-piper (*Totanus hypoleucos*.)

“Mr. Francis Rankin informs me, that one of these birds placed its eggs on the bare ground, in one of his father’s fields near Kirk-

* Egg’s Brit. Birds, p. 255.

cubbin, at a short distance from the shore of Strangford lough. When ploughing the fields, the ploughman observed the eggs, and removed them, together with the clod of earth on which they lay, to a short distance in the ground already ploughed. In the course of the same day the bird was observed sitting on the eggs, which she succeeded in hatching.

“ I have heard of instances of ringed dotterels depositing their eggs on the dried wrack cast up by the sea in winter above the ordinary high-water mark in Carnlough Bay (co. Antrim), but have never known ‘ stems of dry grass,’ (as mentioned by Mr. Selby), or any other substance employed, ‘ to receive the eggs,’ save that in one nest, to which I called your attention last season, fragments of white shells had been collected together on a bed of dark-coloured gravel, so as to form a strong contrast in colour, not well calculated to avoid observation.”*

P. S.—Since writing the foregoing note, I have examined upwards of twenty nests of the ringed dotterel on the shores and islands of Strangford Lough, and, with a few exceptions, they contained fragments of shells of various kinds, evidently carried to the spot by the bird. In one instance the eggs were deposited on dried slesch-grass (*Zostera marina*), which had been cast on shore by a high tide in winter.

11th June, 1849.”

All the ringed plover produced in Ireland, form, I conceive, but a small proportion of those which frequent the coast for three-fourths of the year, and as numerous in winter as at any other period.† During many consecutive years I remarked this species to congregate in Belfast bay towards the time of its departure

* This nest which was pointed out to me on the 1st of July, 1848, was placed several yards lower down on the pure gravelly beach than the line of broken shells, among which it could hardly have been discovered. It was in form deeper than a saucer, and wholly constructed of the shells of the common cockle (*Cardium edule*), which, in consequence of their whiteness, rendered it quite conspicuous among the dark grey gravel. It contained four eggs. The bird, perceiving our approach from a distance, left the nest, and ran seaward in perfect silence. There was another nest very near, among the shingle, the young birds of which were able to fly, and were then feeding along the margin of the water.

On the 8th of May, 1849, a nest, containing four eggs, half incubated, was found on the Kinnegar.

† In January 1849 I observed them on the sandy shores of Islay, off the western coast of Scotland; they breed commonly in the island. The ringed plover was remarked by the late Mr. Geo. Matthews to be plentiful in summer along the coast of Norway, from Trondjeim to the Alten Fiord. In winter they also appeared at some parts of the coast, but in much smaller numbers.

northward in spring, when for some weeks it was seen in numbers associated with hosts of dunlins. The season, no matter how fine, was always far advanced before they took their departure, respecting the period of which, a few dates may be supplied.

1832. May 21st, more appeared on the western side of Belfast bay than I had ever seen together: 31st of that month, some still remained. On the 3rd of June a flock consisting of about a dozen birds was observed: single birds and pairs were at the same time seen, but these would remain all summer. On the 22nd and 26th May, 1833, flocks consisting of about twenty or thirty birds appeared. On May 2nd, 1838, ringed plovers and dunlins together—(they were associated on all the former occasions)—were in remarkable profusion, literally in thousands; the species under consideration forming about one-tenth of the whole. The calls of such a multitude were highly melodious,* and being heard at a distance first attracted my attention to them: they were indeed “the observed of all observers,” passing on the adjacent highway. On the 9th of the same month a large flock was seen here.

The earliest note before me of their return from breeding, refers to 1827, when they were numerous in the bay on the 31st July. Flocks consisting of about twenty (perhaps bred here) I have seen in the middle of this month. August is the usual period of their arrival.

Several ringed plover were observed by Mr. R. Ball and myself in June 1834, on the sands at one extremity of the fresh-water lake at Beltra, between Westport and Nephin mountain, county of Mayo: one which was shot proved to be adult. On the 20th July, 1839, one of these birds was observed on the sandy banks of Lough Neagh, in Shanes castle park; and Mr. Selby, who was present, agreed with me that its manœuvres indicated the proximity of the young. On the 2nd of August, 1846, I saw some single birds, and also twenty-five in a flock, on the shores of that

* The ringed plover has a full rich note at this season, in sound like the word *tu-leep*, sometimes uttered slowly, at others rapidly. Its ordinary note is a simple (and not loud) little whistle.

lake between Toome and the river Mayola. I have been assured by an old sportsman that a few pair of these birds many years ago bred annually at the Brown Moss, an inland locality of a marshy nature, adjacent to the Green Boghill, county of Antrim, as dunlins also did at the same time: the latter were scattered over a wider district than the ringed plover. Both species have long since ceased to frequent the place, in consequence of its being less in a state of nature than at the period alluded to. They have likewise been observed to be in small numbers during summer at a similar locality in the county of Mayo,—a bog near lough Conn, in which redshanks and dunlins nidify. They were consequently believed to be breeding there. The Rev. T. Knox has remarked, in a letter to me, that “ringed dotterels are plentiful along the river Shannon about Killaloe, where they fly about with sandpipers:” he had not observed them during winter, and hence considered that they probably came to breed. One which he killed in June, 1832, had its stomach filled with small shells. Three shot at Strangford lough in June contained minute *Littorina*, crustacea, and insects. A few specimens from Belfast bay examined in winter, exhibited the remains of crustacea. The ringed dotterel has occasionally been observed in September about the oozy banks of a river (presenting fresh-water rejectamenta only) above a paper mill within the circuit of the town of Belfast.

This bird is commonly called *Knot* by the shore-shooters of Belfast bay, the species properly so called, the *Tringa Canutus*, being termed *Dunne*. Having inquired of an old shooter if he had remarked any peculiarity about this species, his reply was that when feeding they fight very much, the stronger frequently driving away the weaker. Their sociability with dunlins, however, is fatal to them; for when by themselves the flocks are so small as to be considered unworthy of the fowler's notice; but when in company with the other, which usually go in large bodies, and consequently are considered “worth a charge of powder and shot,” both are slain together. The two species are generally associated on our coast. During spring tides in Belfast bay, when these birds are driven to

the verge of the shore, and would become an easy prey to the gun, the two species retire in company to large tilled fields, and in a closely packed flock await in patient quietude the receding of the waters. Though at such times one or two ringed plover may be seen dotted along the edge of the flock of dunlins, the species usually occupies one extremity of the general body; appearing, from their superior size and limited numbers, like grenadiers to a regiment of dunlins.

The ringed plover at all times frequents the soft oozy portion of Belfast bay, as much as the sandy or gravelly, in which respect it is less particular than the dunlin. At the eastern side of Holywood, where the beach is of the latter nature, I have often observed it to the exclusion of the dunlin, which instead keeps to the vast oozy banks extending for miles to the westward of the village, where also the ringed plover prevails. This merely illustrates the choice of feeding ground in one locality where its nature is various. Elsewhere the dunlin is met with on gravelly and sandy shores.

A singular variety of the ringed plover was shot on the 1st August, 1842, in Belfast bay. It is wholly white, except where the plumage is ordinarily blackish, i. e. on the gorget, the primaries, and a band towards the extremity of the tail; all of which are, instead, of a very pale yellowish brown. The portions of the plumage, usually of a very pale yellowish white cast, are in this bird of a pure white. Bill pale brown instead of black; legs yellowish. The specimen is preserved in the Belfast museum.

I have examined adult males and females of the ringed plover, shot on the same day in spring, that in no respect differed in outward appearance from each other.

In July 1826 I remarked a solitary ringed plover on the sandy beach of the Adriatic sea near Ancona.

It may here be mentioned of the LITTLE (RINGED) PLOVER (*Charadrius minor*)—a species which at least once occurred in England—that on the 8th April, 1841, when walking in the neighbourhood of Valetta (Malta) in company with Professor Edwd. Forbes, six in a flock alighted very near us, apparently to rest, and after a short time

proceeded on their migratory course, which was in a north-west direction.

Mr. Garrett has supplied me with the following critical note, as well as given me 'ocular demonstration' of its correctness. "In treating of the little ringed plover Mr. Yarrell says,—'This species bears considerable resemblance to the ringed plover (*Ch. Hiaticula*), and is likely to be occasionally overlooked; it is, however, to be distinguished readily on examination by its smaller size; its much more slender form being one-fourth lighter in weight; its black beak, its more slender and lighter-coloured legs, by the broad white shaft of the first quill-feather only of each wing, and by the dusky spot which is present at all ages on the inner web of the outer tail feather on each side, *which feather in the ringed plover is wholly white without any spot*, and there are two white feathers on each outside of the tail in the Kentish plover.'"

"I have, however, observed, in several specimens of the ringed plover, a 'dusky spot on the inner web of the outer tail-feather on each side.' In one of these killed in my presence, on 30th April 1849, out of a flock in Belfast bay, the spot was very distinctly marked; as it likewise was in a female bird which I shot there on the 18th of May. It is sometimes on the male as well as the female, and may perhaps depend on the age of the bird. I have seen many individuals in which the spot was wholly wanting."

The following note may here be introduced :—*Sept. 25, 1838. Charadriidae.* I was interested to-day by observing, close to Thomson's Embankment, Belfast bay, three species of this family at one view; the ringed dotterel (*C. hiaticula*), lapwing (*Vanelus cristatus*), and grey plover (*Squatarola cinerea*). The two former were feeding in company very near the road, and I could not but remark the strong family resemblance imparted by the dark gorget—the most striking mark of the plumage when the birds are viewed from some distance. In addition to the three species in the fore-ground, groups of grey or golden plover (so far apart from the others, and from where I stood, that the

* Brit. Birds, vol. ii. p. 474, 2nd edition.

species could not be known with certainty), appeared on a floating patch of "sleech-grass" (*Zostera marina*) waiting very patiently for the fall of the tide, each with its head under its wing, and all turned with their bodies in one direction, as is usual with the *Grallatores* on such occasions. They thus present a formal rather than a picturesque aspect, which latter the heron does under similar circumstances. Large flocks of lapwings were on flight above the bay; the day was fine and beautifully bright, as the weather has been, excepting on one day, for some time past; thus showing that severe weather is not the cause of this last species coming to the sea-shore.

THE KENTISH PLOVER.

Charadrius Cantianus, Latham.

Is known only as an extremely rare visitant to our shores.

So lately as August 1848 I first became acquainted with the circumstance of its occurrence. On the 23rd of that month, two of these birds were killed by an intelligent lad at the same shot (from a shoulder-gun) with nine ringed plover and a dunlin, far up Belfast bay. The shooter remarked the two birds to be different from any he had ever seen; that their bills and legs were as black as those of the dunlin, while the same parts of the ringed plover were yellow or orange-coloured; they were also noticed as being smaller than the latter. On being shown the specimens of this tribe of birds in the Belfast Museum, he at once pointed out the Kentish plover as being of the same species as his victims. A young relative of my own shot one of these birds about the same time in Belfast bay, opposite Richmond lodge. It was feeding in company with ringed plover, some of which also fell at the discharge; its black legs and other distinguishing marks were particularly observed; but owing to thoughtlessness, both this and the other two specimens were suffered to be lost. It may be remarked that the nearly allied ringed plover were con-

sidered more numerous during the autumn of 1848 in Belfast bay than had ever before been known.

I have since learned, from Robert J. Montgomery, Esq., that two Kentish plover were shot in Dublin bay in the autumn of 1846, both of which he saw in the hands of the shooter. He fortunately procured one of them. They were killed from a flock of eight, said to have been very tame, and apart from other birds. The specimen obtained was kindly sent from Dublin for my inspection.

From the occurrence, in autumn, of the Kentish plover in two years, it might be imagined that, like many other birds, they visited the island in passing southward from their more northern breeding places; but we have no record of their having any such haunts, from which they would be likely to migrate along the eastern shores of Ireland. We would appear to have something yet to learn of the geographical distribution of the species. Indeed, from the circumstance of the Kentish plover being known to visit the shores of Kent and Sussex only, in Great Britain, for the purpose of breeding (arriving in April, and departing in August), and to have been seen but in one other county—Norfolk,* it would have been a fair inference, previous to the occurrence of the bird in Ireland, that the south-east coast of England was the extreme north-west limit of its migratory range. The north of Germany is the highest latitude in Europe which it was known by Temminck to visit; but in a subsequent work its range is extended a little farther,—to the south of Sweden.† It is not known in North America, but is said to be found in Siberia.‡ The more southern shores—as those of the Mediterranean, &c.—are its chief haunt in Europe.

* Yarrell, Brit. Birds (1845).

† Keyserling and Blasius.

‡ Schlegel.

THE GREY PLOVER.*

Squatarola cinerea, Cuv.*Tringa squatarola*, Linn.

Is met with in very limited numbers around the coast in autumn and winter ; it retires northward in spring.

It is the latest of the *Grallatores* in making its autumnal appearance in Belfast bay after the breeding season, and occasionally is not seen until the latter end of September. The 1st of this month (1841) is the earliest certain date of its arrival known to me ; but it is said to have appeared at the end of August. Until December inclusive, a few individuals were always seen, after which month they probably moved southward. They did not again appear until the following autumn, so that their line of flight northward to their breeding haunts in spring was different from their southward autumnal course. In other words they were but of "single passage." Their disappearance before January may be considered to have been a general rule from the beginning of the present century until the winter of 1843-44. The late Mr. Templeton's journals exhibit several notices of his having seen specimens in Belfast market in December, though not later ; and the oldest shore-shooter of the bay named that month to me, some years ago, as the latest time at which he had seen them. Every winter, however, from the last-named to that of 1848-49, has witnessed the presence of the grey plover in the months of January and February in the bay.†

One bird only in the beautiful adult nuptial plumage have I known to be shot here (June 13, 1834). It was in fine condition, and

* This bird has various names, in addition to the above, viz. stone plover both in the north and south ; whistling plover (Belfast bay) ; rock plover (Wexford) ; strand plover (Cork) ; sea cock (Waterford).

† From the 16th to the 21st of Feb. 1846, when the weather was remarkably mild, this species was seen in plenty at Strangford lough, where golden plover and lapwings were abundant at the same time.

was purchased by Dr. J. D. Marshall, but eventually added to the collection in the Belfast Museum.*

The only other specimen in full summer plumage of which I have heard was obtained in Dublin bay in June 1848. In "winter" the grey plover is met with there in small numbers,† and also on the coast of Wexford, where at the end of January it has been remarked as plentiful.‡ At Waterford it was first noticed (by Dr. R. J. Burkitt) in Dec. 1840; and in the "Fauna of Cork" is characterized as a 'winter visitant.' At Youghal, in this county, it was well known, though found sparingly.|| With respect to Kerry, the late Mr. T. F. Neligan of Tralee informed me, in the summer of 1837, that the first of these birds which he saw there were two, brought in the preceding winter to that town. At the sea-coast in its neighbourhood, he himself shot one early in May that year, and saw three or four at the end of the same month. Mr. R. Chute, writing from that quarter in 1846, considered the species rather plentiful in winter on the coast; and on Nov. 15, 1848, remarked that for the last three

* This bird is much more handsome than that described and figured in Mr. Yarrell's work; having the white continued from the forehead downwards, so as to bound the black of the neck and breast on both sides. The white appears to the breadth of an inch below the anterior base of the folded wing as this rests upon the body. This colour terminates about an inch from the fold of the wing, whence black spreads, not only from side to side, but over the body plumage beneath the wings. The plumage of the tibiae, and of the middle under side of the body from them to the tail, is of pure white. Its irides were noted, when recent, as being hazel coloured. It is singular, that of the many specimens killed here in autumn, which have come under my notice, not one ever exhibited a trace of the summer or black under plumage. They have so occurred to Mr. Selby in Northumberland.

The following are the dimensions of a grey plover shot at Strangford lough in Dec. 1834, and taken previous to its being skinned:—

	In.	Lines.
Length total	12	0
— of wing	7	11
— bill above	1	2
— to rectus	1	3½
— naked tibia	0	9
— tarsus	1	11
— middle toe and nail	1	3½
— hind toe and nail	0	1½

Tail-feathers twelve in number; bill and legs black.

† Montgomery.

‡ Poole.

|| Ball.

weeks there had been a good many in Tralee market. It is said to visit the shores of Connemara.

During two seasons, in my younger days, much devoted to shore-shooting in Belfast bay, I looked forward with extreme pleasure to the coming of the grey plover, which, being the latest of our regular autumnal visitants in making its appearance, completed, as it were, the catalogue of migrants for the season; and the whole riches of the beautiful order of birds to which it belongs were strewn upon our coasts. Early in the bright and lovely October mornings, after a slight frost, I was accustomed to meet with this bird in little flocks, feeding at low water about the plashy spots in the banks of *Zostera*, when, wary as it always was, I occasionally managed to get a successful shot. The species was particularly interesting to me, from offering conspicuously, in its general contour—large head, full bright eye, and short bill—such a contrast to the other shore-birds, the *Numenii*, *Limosæ*, *Totani*, and *Tringa*, aided perhaps by association with our beautiful golden plover, the denizen of our wild mountain moors.

Two or three grey plover generally appear together, and any number to about a dozen is not rare. Of late years the species has been rather more numerous. On Sept. 26, 1846, one flock of above twenty, and three smaller flocks, were observed; nine birds were procured at two shots. Montagu, probably with reference to Devonshire, remarked that “seldom more than six or seven are seen in a flock;” and our oldest shore-shooter before alluded to, remarked to me many years ago that he had rarely observed more than eight together. According to Wilson and Audubon, it is much more numerous in the United States of America. Rarely is this bird associated with other species in Belfast bay. An intelligent shooter remarks that, although very wary at all times, it seems to be even more so by night than day, as he can never at that time obtain a shot, though he can occasionally by day. This, he considers, may be owing to the bird’s seeing him better than he can distinguish it. The form of the eye indeed tells us that its sight must be superior to that of man by night. The grey plover, consequently, feeds much at this

period. Of four stomachs (or gizzards, which are strongly plaited internally) examined at different times in reference to food, one was half filled with specimens of the shell *Paludina muriatica*, Lam., chiefly perfect; another exhibited two or three whelks (*Littorina littorea*) and sand; a third, excepting a *Littorina retusa*, was filled with very small whelks; and the fourth contained a portion of a marine plant (*Ulva*), with fragments of stone. Two of these birds were killed in September, and two in December. It is not considered so good for the table, and brings a less price in Belfast market than the golden plover, which is in much estimation. The latter is generally sold from 1s. to 1s. 4d. a couple by retail.

The note of the grey, is louder and more of a whistle than that of the golden, plover. The old shooter already alluded to, who may be considered "good authority," from his having brought both these species, as well as curlews, whimbrels, godwits, and knots within shot by imitating their cries, terms the note of the grey plover a double whistle; that of the golden, a single one. Whistling plover is one of the names by which the species especially under consideration is distinguished upon our coast.

I have known the grey plover to frequent the sea-shore only. When driven off its feeding ground by the flowing tide, it does not leave the shore, but remains on floating sea-weed, or on some dry spot, until the ebb has taken place. The golden plover and the lapwing fly inland under such circumstances. Sir William Jardine, however, mentions his having in one instance shot a pair in the month of August on the banks of one of the Lochs Maben, Dumfries-shire.* At Godalming, too, in Surrey, a few have been killed.† The breeding haunts of this bird in the United States, as reported by Wilson and Audubon, are inland, and similar to those resorted to by the golden plover with us. Black-bellied plover is the name applied to the species in their works; the 4th volume of the Ornithological Biography contains an interest-

* Brit. Birds, vol. iii. p. 288.

† Letters of Rusticus, p. 159.

ing account of it. The term *Squatarola helvetica*, used by Cuvier—it was the *Tringa helvetica* of Linnæus—is adopted in Bonaparte's Comparative Catalogue of the Birds of Europe and the United States.

THE LAPWING.

Green Plover (in Ireland), Peewit.

Vanellus cristatus, Meyer and Wolf.

Tringa vanellus, Linn.

Owing to the prevalence of bogs and humid tracts is abundant in Ireland.

IN the spring and summer, these beautiful and interesting birds enliven all our moist moors with their presence, and increase wonderfully, considering the extent to which they are robbed of their eggs. Idle country lads and mountain herds often lie on the mountain side from morning till evening, for the purpose of watching the poor lapwing to her nest; and in some places have confessed to me that they had “almost lived upon the eggs” so procured. In the north of Ireland these are very seldom brought to market, though they are to Dublin, in large quantities. The places resorted to by the lapwing for breeding are of various kinds; as the elevated mountain moor, the low morass, pastures, rushy meadows, and fallow-lands; more rarely, bean-fields and rocky marine islets. About the middle of February, they generally revisit and take up their abode on their breeding station; but the time varies according to the season. On the 1st March, 1833 and 1834, a friend noted them as beginning to fly around his dog on the Belfast mountains; but so late as the 26th March, 1843, I saw a number about the margin of a bog, which, though the weather had been fine and open for some time before, evidently had not yet chosen sites for their nests. Had they done so, we should have been saluted by them in crossing the bog; but not one came near us, nor even hovered over the bog itself.

On the 15th April, 1847, I was reminded, in an interesting manner, of the earlier breeding time of the lapwing than of the golden plover, when visiting the same locality. The former were all paired, and going through the evolutions on wing peculiar to the season, while the golden plover which make their congener's summer abode their winter one, had not yet left it, a flock of about thirty being on the ground. The lapwings looked upon the others as intruders, and one bird boldly swept down to buffet the flock, among which it alighted and chased several individuals, until the whole body took flight to a little distance.

As remarked to me, "Mr. Hewitson, in his beautiful work on the Eggs of British Birds (p. 261), does not distinguish between the manœuvres of the male and female lapwing in the breeding season, but speaks generally of the species whirling about to lead one from its nest. It is the male bird (as correctly stated by Mr. Selby) that first endeavours to divert attention from the nest, until the female can steal away from it unperceived."* The hollow bumping noise, probably produced in the throat, which the male makes when arriving within a few yards of our head, is considered by Mr. Poole to be "evidently intended for menace." As well observed by that gentleman, "The lapwing seems to experience great difficulty in rising to a height in the air suddenly when disturbed, and therefore finds it necessary to take several rings before getting out of shot."

The evolutions of the lapwing in its breeding haunts are various and extremely interesting to witness. It may be said to keep a "drumming" noise as well as the snipe, though not to the same extent; and I have remarked that this may sometimes be heard both when the bird is ascending and descending in its flight. The sound seems to arise from a peculiar, though to the eye not very marked, motion of the wings, which beat the air with more than ordinary force when it is produced.† The motionless attitude in the air,

* Mr. J. R. Garrett.

† Mr. Selby observes that "these movements are attended by a loud hissing noise of the wings, arising from the rapid motion, aided by their peculiar form, which offers a broken resistance to the air," (vol. ii. p. 222).

like that of the wind-hover or kestrel, is highly attractive ; and the occasional habit of the species, when on the ground, of throwing up vertically its singularly formed and beautiful wing, is not without its interest. The crest of this bird (according to an observant shooter) is always borne proudly erect during the breeding season ; but in autumn and winter is carried horizontally, as the species is generally figured.

Sir Walter Scott, in the "Tales of my Grandfather," refers to the persecution of the lapwing in the following words :—"The country people retained a sense of the injustice with which their ancestors [the Covenanters] had been treated, which showed itself in a singular prejudice. They expressed great dislike of that beautiful bird the green plover, in Scottish called the peaseweep. The reason alleged was, that these birds being, by some instinct, led to attend to and watch any human beings whom they see on their native wilds, the soldiers were often guided in pursuit of the wanderers, when they might otherwise have escaped observation, by the plover being observed to hover over a particular spot. For this reason the shepherds often destroyed the nests of the bird when they met with them." 2nd vol., chap. vi., 2nd series. In Yarrell's History of British Birds there is a very interesting account of an opposite kind, in which the founder of the family of Tyrwhitts having fallen wounded in a skirmish, was saved by his followers, who were directed to the spot where he lay by the cries of these birds, and their hovering over him, vol. ii., 483, 2nd edit.

An encounter between a rook and a pair of lapwings was once witnessed by Mr. Poole, "when the former must either have been intent on booty or on enjoying the sport of terrifying the anxious parents. So often as they were seen to drive him away did he return to renew the combat." In the 'British Naturalist' (vol. i. p. 305) there is a graphic account of the lapwing's performance, when the egg-plundering grey crow visits its breeding haunt. On the shore they do not, however, display such gallantry, as I have seen the black-headed gull drive them quite away when they approached its feeding ground.

The improvement of the country, by drainage and other means, has been more injurious to the lapwing than to any other bird, and has wholly banished the species from many of its former haunts. It is often interesting to observe the tenacity with which, year after year, the poor bird clings to the place of its birth ; or, if a parent, to that in which it brought up former broods. The once spacious morass, when dwindled down to a spot of perhaps fifty yards in diameter—lying too low for drains to act upon it—will still exhibit its solitary pair of birds ; and even the moor, after being turned into arable ground, is frequently revisited as a nesting place. When undisturbed, these birds may be heard uttering their cry at a late hour in their breeding haunts. On the 1st July, I have heard them, and snipes at the same time, calling, until near ten o'clock P.M., about the heath-covered summit of Wolf hill. Lapwings generally call at all seasons during moonlight.

So soon as the young are able to leave the nursery, they, with their parents, gather into flocks, and betake themselves to other quarters. On the 21st July, 1833, about eighty birds were observed, in company, about the head of Crumlin river. On the 4th of August, I remarked a flock of forty leave the Belfast mountains, and fly towards the shore, the weather being dry and warm, as it had been for some time previously. Until the 13th there was not any rain. Their breeding places in the locality just named were occasionally visited by me, until the 16th of that month ; and a few birds were seen at all of them but one ; those which remained being, doubtless, individuals whose nests had been robbed of their eggs early in the season. That these birds had young was evident from their manœuvres. The number bred about here is very trivial, compared with that at other places. On the 2nd of August (1846) I saw above 200 flocked on the shores of Lough Neagh, near Toome ; and on the 31st of July (1840) not less than 500 rose on wing together on the banks of the Shannon, near Portumna. Late in the autumn, and during winter, some thousands may be seen at these places during a fore-

noon. Lurgan Green, on the coast of Louth, was formerly (until drained) a favourite haunt of these birds.

In the autumn and winter, lapwings, collected into flocks, frequent extensive low-lying marshes, flooded meadows,* rivers such as the Lagan† near Belfast, and estuaries of a similar character to the bay here, where extensive soft and oozy banks are exposed at the fall of every tide. In such localities they remain until the breeding season commences. Their numbers vary considerably in different seasons. In the autumns and winters of 1836-37, and 1837-38, they were considered particularly abundant in Belfast bay, flocks of 150 being seen. Subsequently they became much more numerous. Twice the number, just mentioned, were observed together in January and February, 1845. On the 17th of the latter month I was much interested by observing the variety of form assumed by a flock, consisting of about 300 birds, on wing above the bay. They would sometimes appear in a line, then in a circle, again in a diamond or lozenge form, and every intermediate shape; while occasionally they rose and fell in the air, as if about to alight, but wanting in resolution to do so. Eventually they alighted. The snowy-white plumage of the under surface of their bodies is seen with brilliant effect in the course of their wheeling flight: that of each individual of the flock being exhibited at the same instant. Every motion of the lapwing is rather slow;—the reverse of the rapid shooting flight of the dunlin, redshank, knot, &c. which may be perceived at the same moment, and which it is so beautiful to witness. All the lapwings are said to leave the bay in the evening for inland quarters. By moonlight, however, a few may be seen occasionally feeding there. They likewise retire inland during the day, when driven

* These seem to be the most delectable of all feeding grounds, as I have invariably remarked lapwings to leave haunts of every description for them.

† A friend who resided many years on the banks of the Lagan, remarked, that lapwings came regularly in September in flocks of from forty to fifty birds, and remained until about the commencement of the breeding season. Towards the end of January, and not until then, they frequented pasture-fields in the vicinity of the river.

off their feeding ground by the flowing tide.* To this ground they again regularly return, so soon as it is exposed by the ebbing waters, although invisible from their resting place. That true sea birds have such a faculty is well known to naturalists; but it is equally strong in the lapwing,—an occasional frequenter only of the sea-shore.

So early after the breeding season as the 24th of July (1838), a flock has been seen in the bay; but before September they rarely visit it in large numbers.† They sometimes remain late in spring, as in 1839 and 1840, about fifty having been observed together on the 23rd March in the former, and about as many at that period in the latter year. They sometimes appear in great bodies during autumn, on low rocky islets near the entrance of the bay. Strangford lough is frequented, in the autumn and winter, by large flocks of lapwings, as are also Wexford harbour and other suitable bays.

“A variety of the lapwing, nearly of a dark mouse-colour, shot among a flock in the county of Kildare,” is in the possession of the Rev. Thomas Knox.‡

On looking to the food in the stomachs of ten lap-wings, killed in the winter and spring, it was found to consist of coleopterous and other insects; larvæ and earthworms together with seeds, and other vegetable food. In one were specimens of the subaquatic shell *Limneus fossarius*. I have known lapwings to be kept some years in gardens (even four or five birds in one garden), during which time they lived wholly on what they could pick up; no food being ever supplied to them. They must have proved very serviceable by the destruction of injurious insects, &c. Mr. Poole has well remarked that “Among birds useful to the farmer

* The remark of an excellent observer, Mr. St. John, that the lapwing “is altogether a nocturnal bird, so far as regards feeding” (Wild Sports, &c. p. 135), will not apply here.

† When on the way from Cowes to Southampton, on the 27th August 1841, I observed a large flock of these birds to alight on the fine banks of *Zostera marina*, just similar to those frequented by them in Belfast bay.

‡ Mag. Nat. Hist. vi. 519.

the pewit ought certainly to be included. The gizzard of one which I examined last spring was completely crammed with the destructive wire-worm.”*

There is not, that I am aware, any migration of the lapwing to or from the north of Ireland. During the most severe frost, as well as at other times, the ebbing tide leaves behind for them, abundant food in our bays and estuaries.† It would appear to be otherwise in England; as Mr. Selby, writing from Northumberland, remarks:—“Here they chiefly frequent the fallow grounds and turnip fields, remaining till November, or even later, should the weather continue mild or open; but in case of severe frost most of them retire, and pass the winter farther to the southward, (vol. ii. p. 222). Sir William Jardine, too, whose observations have been chiefly made in Dumfries-shire, states, that “Some pewits reside constantly with us; but at the same time numbers leave our islands, and others annually perform a periodical migration to the breeding grounds, arriving there with as much regularity as our summer visitants from a distance; also it is probable that we receive a few birds in their removal from other countries,” (Brit. Birds, vol. iii. p. 282). With respect to Morayshire, Mr. St. John remarks:—“Though the pewits generally leave us early in October, a flock is sometimes seen at the end of the month.”‡ Capt. Fayrer, R.N., who for several years commanded one of the mail steam packets plying between Portpatrick and Donaghadee, has informed me, that when crossing the channel in autumn he had seen flocks of lapwings flying from, as well as to, Ireland.

In Holland only (a country admirably suited to it), and in the low marshy districts bordering the Rhone and the Rhine, have I—on the continent of Europe—remarked this bird to be as plentiful as in Ireland.

* Zoologist, March 1848, p. 2023.

† I have remarked them standing, during intense frost, with their legs wholly immersed in the tide.

‡ Tour in Sutherland, vol. ii. p. 9.

THE TURNSTONE.

Streptilas interpres, Linn. (sp.)*Tringa* " "

Is met with annually around the coast, always in autumn, and occasionally at other seasons of the year ;

BUT retires—with possibly a few exceptions—to more northern latitudes, to breed. In Belfast bay, this bird, so interesting from its peculiar manner of seeking food, is chiefly known as an autumnal visitant, appearing regularly, early at that season, in very small flocks, or singly. On the 25th of July I once knew a couple to be killed (in company with dunlins) ; but about the middle of August is the usual time of their return from breeding quarters. From this period they commonly remain until the beginning of October,—not more, perhaps, than a dozen altogether during the season having fallen a sacrifice to shooters. They then generally remove to more retired localities.*

About the estuary, within a few miles of the town, they are only of occasional appearance ; and rarely above half a dozen have been seen in company. At a sweep of the coast called Ballyholme bay, towards the entrance of the harbour, consisting chiefly of sand, but with some little banks of gravel and stones exposed at low water—hence a favourite haunt,—I once reckoned twelve, and again twenty, together. I have observed them there, in several years, from the middle of September till the beginning of October ; and during one season, when they were frequently seen, remarked that the same number of birds never appeared together twice, although they had not been thinned by the fowling-piece. It was pleasing to observe them, when sprung from the rocks at the side of the bay, always fly over the large tracts of

* Mr. St. John has remarked, respecting Moray-shire, that "The turnstone * * arrives in this country at the first commencement of September ; but appears only to make it a temporary resting-place on its way to the south." (Tour in Sutherland, &c. vol. i. p. 287).

sand without alighting; reserving for that purpose the little banks of gravel or stones. When a number are seen together in bold rapid flight, they present quite a brilliant spectacle, from the silvery whiteness of the whole under plumage; and, when making a sudden turn, even flash upon the sight. The white marking upon the otherwise dark-coloured wing, too, has a very handsome appearance. Their call is peculiar, and very pleasing; being loud, with the same note repeated hurriedly several times. When thus in flocks, they are generally too wary to admit of a sufficiently near approach to enable us to observe their peculiar mode of feeding, whence their name is derived. But the first of the species which came under my observation, having been a single bird, admitted of my close approach, and was so busily occupied in turning over the pebbles on the beach of the Kinnegar, that by walking directly towards it on the exposed shore (perhaps unobserved by the bird), I approached so near, three times, as distinctly to perceive its mode of proceeding. Being a juvenile sportsman, and not having essayed "the art of shooting flying," I in each instance had the cruelty to fire at the poor bird, which, however, seemed nothing the worse from the first or second shot;—at the third, it fell.

From the labour of turning over the pebbles for its prey—the crustacea, &c. beneath—the turnstone, as may be supposed, moves much more slowly over the beach than the other *Grallatores*; which have only to pick up what is exposed to view.*

This species is rarely met with in Belfast bay in winter,† spring, or summer. It has been obtained in the first named season. On the 27th March, 1838, a small flock was seen. On the 25th May, 1825, a female bird which came into my possession was shot, (on dissection fifteen ova, in size from a mere point to that of a pea, were reckoned); and on the 7th June, 1833, I observed a single bird on the shore of the Kinnegar.

* Audubon, in the fourth volume of his Ornithological Biography, gives, from his own observations, an extremely interesting account of its manner of turning over various objects.

† So early as Aug. 23, 1848, a bird in full winter plumage was shot here. About a week previously, a knot (*Tringa canutus*) in full summer plumage was obtained.

On the exposed coast of Down, about Newcastle, I have seen the turnstone in autumn. One shot from a flock of fifteen at Springvale, on the 12th August, 1837, was kindly sent to me by George Matthews, Esq. :* in its stomach were some opercula of small univalve shells. A number of these birds were observed at Dundrum on the 31st December 1831 ; and about the 4th of the following month of February, two were obtained there. The turnstone winters in Strangford lough. A flock of about two dozen was remarked, in the middle of Dec. 1835, “at a little fresh water stream that runs into the sea ;” and at the end of January 1844 several appeared at the same place. The stomach of one killed in this lough, early in Dec. 1846, was filled with the young of the common whelk (*Littorina littorea*). In the first week of March 1847, a few single birds were seen there.

On parts of the Dublin coast, as at Baldoyle, the turnstone is said to be “common from August till March.”† One day in September 1837, three flocks, consisting of from twenty to thirty birds each, were observed at the North Bull, Dublin bay, and four individuals killed, of which one was in adult plumage. On May 22, 1838, four were seen together by a party of naturalists visiting Lambay island, off the Dublin coast : one of them was procured. The turnstone is stated to be “rarely seen about the harbour of Waterford ; but common at the Saltees and coast of Wexford.”‡ Several small flocks of five or six individuals—it was believed old and young mixed—were observed about the 12th of August, 1838, near Dungarvan, county of Waterford, by Mr. R. Davis, jun. ; whence one was sent to him on the first of that month. The species is considered as not uncommon there. It occurs, but not commonly, at Youghal.|| In reference to Cork harbour, I have been informed by Robert Warren, jun., Esq. that he shot a young bird of the year there, late in Aug. 1848 ; and that turnstones were common in that month two or three years before ; several

* This gentleman remarked the turnstone to be common in summer along the coast of Norway, from Trondjeim to the Alten Fiord. He also saw some birds in winter.

† Mr. Robert J. Montgoinery.

‡ Dr. R. J. Burkitt.

|| Mr. R. Ball.

small flocks being seen on one day, from which a few birds were killed by himself and his companion. Many might have been obtained had the flocks been followed, as they were very tame when sprung, and alighted again within thirty or forty yards. On the 12th Feb. 1849, a flock of seven or eight birds was observed there. The turnstone is a visitant to the Kerry coast;* and at Miltown Malbay, county Clare, numbers were observed in September 1837, in little parties of two or three together, which admitted of a close approach, occasionally within ten or twelve paces.†

I am disposed to believe that the turnstone may breed in Ireland, though no proof can be offered. On June 25, 1836, my friend Mr. Richard K. Sinclair saw four of these birds (of which one was adult, and the others young) shot from a flock of six, on one of the islets of Strangford lough. It can hardly be supposed that birds bred in a higher latitude would have migrated hither so early as midsummer. Mr. J. V. Stewart, in a letter written in Feb. 1837, stated, that although he had neither found the nest nor eggs in the north-west of Donegal, he had most frequently killed the turnstone there in the breeding season. Four have been already mentioned as seen on the retired island of Lambay on the 22nd of May. On the 11th of that month, in another year, one was seen on the strand near Dublin. Other single individuals have already been noticed as obtained in May and June; but their occurrence hardly affects the question. Mr. T. F. Neligan was of opinion that this bird breeds in Kerry, from the circumstance of one which he shot at the end of May or beginning of June, 1837, containing on dissection an egg just ready for exclusion.

In the present year, 1849, a correspondent remarked, on the 20th of May, in reference to the coast at Drogheda:—"Turnstones are still here. I shot two, in the most beautiful plumage I ever saw, on the 16th."‡ At Strangford lough on the 3rd of June, Mr. J. R. Garrett noted that "On the small island called Gabbogh, lying between Kirkecubbin and Greyabbey, I had the

* Mr. T. F. Neligan.

† Rev. T. Knox.

‡ Mr. R. J. Montgomery.

pleasure of seeing a pair of turnstones in company with a few ring plover. I could not find their nest; but they probably either have or will have one there, as they were so tame as to come within shot. At Gransha point I saw a flock of above twenty turnstones; which were very wary, and did not seem to have paired. They are called *stone-raws* by the shooters here." On the 6th of June one of these birds, feeding among the rocks at the largest of the Sovereign islands, coast of Cork, was disturbed by a party landing there; within a few yards of which, it flew.*

Against the turnstone breeding in Ireland, however, is the important fact of its being unknown to do so in any part of Great Britain or the adjacent islands. Mr. Hewitson remarks, in his work on the eggs of British Birds:—"I have never heard of an instance of the turnstone breeding upon the British islands; although led to expect it from having at various times seen several of the birds upon the Northumberland coast, and also upon the Shetland islands, during the months of summer. These are, however, usually in small flocks, and most probably yet immature," (p. 263). In Orkney, too, it is remarked:—"A few occasionally remain during summer; but we have never heard of their being known to breed."†

THE SANDERLING.

Calidris arenaria, Linn. (sp.)

Tringa „

Is met with occasionally on most of the low coasts of the island;

BUT can hardly be called an inhabitant of any parts, excepting where extensive sandy beaches prevail: it breeds in more northern latitudes.‡ This bird cannot be termed common. The remark

* Mr. Robert Warren, jun.

† Hist. Nat. Orcad. p. 60 (1848).

‡ Wilson, in his American Ornithology, well observes that "these birds are most numerous on extensive sandy beaches in front of the ocean." His brief description

made by Mr. Yarrell, in reference to "Great Britain and Ireland," that it is "not so plentiful" as the dunlin, gives no idea of the relative numbers of the two species. In Belfast and Strangford loughs there are fully two thousand dunlins to a single sanderling, and on the coast of Ireland generally there may probably be one thousand of the former to each individual of the latter species.

As the shores of Belfast bay present comparatively little sand, this bird is rarely to be seen there, except when passing to and from its breeding haunts.*

On the 5th of May, 1832, a warm, sun-bright day, with blue sky overhead, I saw this species to much advantage, at the Kinnegar, near Holywood; and particularly so, from my being on horseback,—our shore birds well knowing that an equestrian is less to be dreaded than a person on foot. It was high-water, so that the birds had been driven from their feeding banks to the little gravelly promontories uncovered by the sea. Two birds of that most wary species the curlew, admitted my approach within thirty paces, and from within less than half the distance I reconnoitred a small flock of dunlins, ring dotterels, and sanderlings. To the unassisted eye, these last, in their grey attire, appeared like dunlins in the winter, or *purre* plumage; but the season of the year indicated that this could not be. A pocket telescope being brought into requisition, that a dunlin and one of these birds might be viewed together, the back, wing-coverts, and hinder part of the neck of the latter, contrasted with those parts of the other, proved the species, by displaying the peculiar grey hue of the sanderling. Several of these birds were then observed among the flock, which, composed of the three species, each so handsome, though differing much in the general tone of colour and disposition of markings, now appeared most attractive in full freshness of their new nuptial attire. As they were all perfectly motionless, some sitting,

of the habits of the sanderling is admirable. Audubon, in his Ornithological Biography (vol. iii. p. 231), treats more fully, and in a very interesting manner, of the species.

* January 8, 1831, a sanderling was shot in Belfast bay.

others standing, several with their heads beneath their wings, awaiting, with exemplary patience, until the ebbing waters would uncover their feeding grounds, they altogether—variety of attitude and colour combined—formed the prettiest and most innocent-looking group of birds I ever beheld. Truly, a lovely “picture of repose was there.”

During almost every autumn for many years past, I have known a few sanderlings to be shot in Belfast Bay, where they generally appear about the beginning of September; but soon after the middle of July 1837, one was killed. In other years the earliest appeared on the 23rd July (1848), and on the 10th of August (1849),* the last still retaining the summer plumage.† They—in very limited numbers, often indeed singly, and five being the most I have heard of being seen together—keep by themselves on the shore, or mix with dunlins, &c. After September, the migration from breeding haunts being over, they are to be met with in their favourite abodes, extensive sandy beaches. From those at Dundrum (co. Down), Portmarnock, and Dublin Bay, I have seen specimens which were procured from that period until the end of January. In a note, kindly supplied by Dr. J. D. Marshall, two sanderlings are mentioned as having been obtained about fresh water, though not far distant from the sea;—one near Downpatrick, in December 1830, and the other at Newtownlimavady, on the 8th of January, 1831. The sanderling frequents the coast of Donegal, but is said to be very rare.‡ Mr. R. J. Montgomery, having had good opportunities of observing this species, kindly supplied me with the following information in the spring of 1849:—

“The sanderling appears in Dublin Bay in small flocks, on the

* Two specimens, belonging to my friend, R. K. Sinclair, Esq. were killed by him in Red Bay, county Antrim, on the 22nd of August, 1833. So early as the 22nd or 23rd of July, he saw there, in company, a dunlin, three sanderlings, three red-shanks, and nine ring dotterels; most, if not all of which last, were adult birds.

† On the 11th September, 1839, sanderlings were noted as having been about the Long Strand, near Belfast, for some time; one killed on that day exhibited on the back a good deal of the blackish summer markings. On examination of the stomach of another, obtained a few days afterwards, it was found wholly filled with minute insects.

‡ Mr. J. V. Stewart.

sea-side of the North Bull, where I never saw more than, I should think, from fifteen to twenty at a time—and not more than one or two such flocks in a day. In Drogheda bay, they frequent the same sort of locality, never coming up the river at low water, as the purres, ring dotterels, red shanks, &c. do, to feed on the mud banks; but are always to be found on the surface of the strand, at the edge of the water, in flocks of from twenty to a hundred or more. In a walk from the entrance of the Boyne to Clogherhead (about five miles of strand), I have seen two or three flocks, containing from sixty to a hundred individuals. If gone up to cautiously, they allow of a very near approach;—much more so than any other of the shore birds, except the ring dotterel. One day last winter I wanted some specimens, and, on firing into a large flock as they passed me, knocked down twenty-two, all sanderlings. They occasionally mix with the purres, but keep generally by themselves. I cannot state exactly the time of their arrival; but I have shot them in Dublin bay in September.”

At Youghal, they were considered rare by Mr. R. Ball; but on the beach at Clay Castle near that town, he has seen them in winter in little flocks—three or four together, and has been much interested in observing their habit of running with great rapidity to the base of a huge retiring wave, and back again at a similar pace, so as to avoid being wetted by the next advancing one. They occasionally, he remarks, appeared almost white at that season. Sanderlings (as reported to me in 1837) are of common occurrence on the coast of Kerry.* On the sand hills at Castlegregory, in that county, Mr. R. Chute shot four or five in adult plumage (though all differing a little from each other), on the 31st of May, 1844. From their appearance at this season he imagined they might be breeding; but could not find any nests. The species is said to be common at Connemara.†

On the 31st August, 1839, I saw one on the beach at Ballantrae, Ayrshire.

* M. T. F. Neligan.

† Mc Calla.

THE OYSTER-CATCHER.

Sea-Pie. Oyster Plover.

Hæmatopus ostralegus, Linn.

Is common around the coast, and permanently resident.

Its favourite resort is the long range of bright sandy shore, with which its lively and handsome appearance harmonises ; but in scenes of a very different character it is not less attractive ; its pied plumage of pure white and black, with orange-red bill and legs,* appear particularly fresh and beautiful, as the sea-pie perches on the darkly-grim basaltic rocks which, monster-like, raise their heads above the ocean in the vicinity of the Giant's Causeway. Its loud, clear, and shrill whistling note—teč-wheēp sounds pleasingly on the ear. Such, however, is not always the case. Along the coast of Norway, where this bird was met with, though not in large numbers, by Mr. George Matthews and his sporting companions, they were often much annoyed by its loud call alarming ducks of various species, in the pursuit of which they were engaged. Low rocky coasts, on which limpets, *Littorinæ*, and other univalve shell-fish abound, are also much resorted to.

Oyster-catchers are rarely met with singly in Belfast bay, but appear in small flocks, often consisting of about fifteen individuals. They generally frequent the sandy reaches. Occasionally I have observed them busily engaged feeding on the soft oozy banks, and sometimes with their legs quite immersed in the water. They are extremely wary, and during the day keep farther from the shore than any other of the *Grallatores* ; but in the very early morning have been shot from behind ditch-banks, bordering the Long Strand, very near the town. When passing an inlet of the bay on one occasion, at the early hour of five o'clock in the morning, I observed a flock close to the shore, and near the

* The eye, too, though not visible at such times, is handsome ; the black pupil being surrounded by a bright red iris, and the eyelid orange-red.

highway, though in passing the same place *daily*, during two summers, not one ever appeared within a furlong of the spot. In feeding by night also, they commonly (as proved by the cry) frequent localities of this kind, where they are never known by day. "When a flock of Oyster-catchers have been on wing for a short time, they utter a peculiar brief note, so frequently repeated, that it gives the idea of a general *conversation*, interrupted occasionally by a whistle of longer duration."*

Montagu remarks, that "in winter they assemble in small flocks;" an observation commonly repeated by subsequent authors; but in Belfast bay, they are associated for three-fourths of the year; indeed at all times: even to some extent, in the breeding season—after that period they muster again at the beginning of August.† A favourite haunt in the bay is a very extensive mussel-bank, near Garmoyle, from being commonly seen feeding on which, these birds have received the name of *mussel-peckers*, which, here at least, is much more appropriate than *oyster-catcher*; as the *Ostrea* inhabits too deep water to be ever accessible to them. The contents of the stomach or gizzards (which latter are as fully developed as in graminivorous birds) of eight sea-pies, shot in various parts of the bay in spring, autumn, and winter, proved, on examination, to be as follows:—Five contained only the opercula and portions of the animal of the whelk (*Littorina communis*), with which some of them were wholly filled;—one exhibited merely the opercula—about forty in number—of *Purpura lapillus*, and of all sizes, from the smallest to the full grown: another (shot on Nov. 13) presented a good deal of vegetable matter, consisting of tender roots and green leaves; also small white worm-like larvæ; a few opercula of the whelk, and an operculum of the buckie (*Buccinum undatum*);—in the crop and stomach of the last, which was remarkably fat, were found fifty

* Mr. J. R. Garrett.

† I did not see any of these birds about the island of Islay during the month of January 1849, and was told that they always leave it and the neighbouring islets in autumn. They return early in the year, and breed in numbers on the shores. Many of their eggs were found on the Rabbit Island off Ardimersy, from the middle to the end of May 1848.

opercula of large whelks; about twenty-five animals of well-sized limpets (*Patella vulgaris*); in addition to which was a holothuria (*Cucumaria*). In others, not particularly noted down, I have found the flesh of the mussel; but univalve shell-fish, and more particularly the whelk, are certainly their chief food in Belfast bay. In no instance have I found any particles of shell, which affords the negative evidence that the animals were all extracted from their habitations by the bird, whose peculiarly formed bill is admirably suited to such a purpose; i. e. for "picking *wilks*!" On the same bank with the mussels (*Mytilus edulis*), univalves are also found. Wilson, in his very interesting account of the nearly allied *Hematopus palliatus* (the representative of our species on the shores of the United States), mentions his having remarked numerous borings made by the bill of the bird in the sand. Remembering this, I on one occasion, after observing several oyster-catchers feeding for some time on the sands at Ballyholme bay, went to the spot to examine if any excavations of the kind were visible; but none appeared. A few of the fresh double valves of *Venus virginea* were lying about, and it was believed that the birds had been preying on the once contained animals, as these had disappeared.

Although the oyster-catcher is known to be able to dive well, it may be mentioned that an intelligent shooter of my acquaintance has witnessed its remaining as long under water as one of the diving ducks (*Fuligulæ*). He has seen one for about half an hour dive repeatedly—whenever approached—until disabled by the blow of an oar. A singular instance of the tenacity of life (if it may so be termed) of one of these birds occurred in the shop of Mr. Nichol, bird preserver, &c. at Belfast, in Feb. 1849. A man brought a wounded one to be stuffed; but was told that it must first be put out of pain. To accomplish this object, he pressed the breast-bone towards the back with his hand until the bird apparently ceased to breathe, and then leaving it on the counter, a corpse, as he thought, took his departure. It soon, however, exhibited symptoms of life, and made its way from the counter to the ground. Within a very few hours it partook of

mussels, and a day or two afterwards eat of porridge, the first time this was offered. On such vegetable and animal diet this oyster-catcher was fed for three weeks after capture, when these notes were made: the shells of the mussels were opened for it. The bird was quite tame from the day of its being received.

Aug. 1, 1849. From the period last named until now, this bird has been in the possession of Dr. J. D. Marshall, who considers it a most interesting pet. It runs eagerly to him to pick the animals from the shells of mussels held (very slightly open) in his hand, and cleans them out with great rapidity. Lest any fragments should remain in the shells thrown aside, after its being thus fed, it goes rapidly over them again. The servant having partially boiled some full-grown buckies (*Buccinum undatum*) for it one day, endeavoured for a long time, with the aid of a fork, to extract the animals; but had to give up the attempt. The shells containing them were then flung to the bird, which on the instant withdrew the animals from their habitations, and ate them. It is comical to see this bird, when hungry, quickly turning over, either partially or wholly, any objects in the yard, as plates, &c. in search of food beneath them. Its bill, too, is thrust, full-length, into any crevice of the ground, chink, &c., causing the head at the base of the bill to be generally covered with earth. It ate freely and without hesitation of various kinds of food, the first time they were offered, including flesh-meat and bread.

This bird had the freedom of its master's house, and was very partial to ascending the stairs to the uppermost rooms, sometimes remaining quietly stationed for hours looking out of the windows, generally of the highest or fourth story. It remained much perched on one foot. When thus in the house, its master had only to call the bird as he ascended the stairs, and it came running to him from wherever it was stationed. Once, early in its captivity, this bird escaped from a window on the third story, and flew to near the end of a long street, when the injured wing compelled a descent to the ground, and it was again caught.

Colonel Sabine remarked, at Ballybunian, on the coast of Kerry, in the month of July 1833, that "oyster-catchers, which were

abundant there, were more frequently in groups than in pairs, though it was the breeding season." On the north-east coast, also, this may frequently be observed. On some parts of the broad summits of the lofty precipitous cliffs at the peninsula of the Horn, in Donegal, these birds were in parties at the end of June 1832. In the same month of 1834 they were similarly associated on the sands of Clew Bay, county of Mayo. At this season they may likewise be observed scattered in pairs over the shore of the largest of the Copeland Islands (Down), where they breed, as well as about the islands of Strangford lough, where, however, a pair only will be seen occupying some of the very small islets. When I visited this lough on the 20th and 21st of June, 1832, three eggs were found on the bare gravel, about two yards above high-water mark on Skart Roek. They were known to our boatmen as those of the oyster-eatcher, as they had often found similar ones before. A pair of these birds, calling loudly, kept flying incessantly about us just out of shot, when we were on and adjacent to the islet, thus affording circumstantial evidence of the nest being theirs. The eggs, not agreeing with what I had seen figured as the oyster-eatchers, were carefully kept:—on after-comparison with Mr. Yarrell's description they were found to agree with it, being "yellowish stone-colour, spotted with ash-grey, and dark brown." In the same number of words they could not be better described; but, considering how they differ from other eggs found in similar situations, they may be described as displaying spots and variously-formed markings (some of which are linear) of ash-brown and dark grey disposed over the entire shell, though not numerously. I am thus particular, from the circumstance of the egg being very differently figured in works upon the subject. Montagu, too, describes it to be "olivaceous brown, blotched with black: somewhat larger than that of the lapwing;"—neither colour nor size agreeing with mine, which are nearly twice the size of lapwings' eggs. A person at Dunfanaghy, county of Donegal, who attended us in 1832 as guide to the bird-haunts about Horn Head, stated that he had robbed not less

than a hundred nests of the oyster-catcher, and described the eggs to be "of a very pale brown, with darker spots.* The evolutions of a pair of these birds, when I was on Gull Island, Strangford lough, in June 1846, evinced that they had a nest there. Mr. J. R. Garrett visited several of the islands, and a part of the eastern shore of this lough, on the 3rd June, 1849, and ascertained that oyster-catchers were breeding there; but not numerous. He saw only three or four of their nests (in some of which were eggs) and one pair of the birds themselves. They appeared to have young; but these he could not find. On that gentleman's going to other islands of the lough on the 6th of June, a nest with eggs was found on the Bird Island, off Island Mahee, and the only oyster-catchers seen were its owners. "The nest (he remarks) was merely a depression in the gravel, and did not contain any fragments of shells, as described by Hewitson. The same observation applies to about half-a-dozen seen on the Strangford islands, although the nests of the ring plover, placed within a few yards of them *did*, in almost every instance, contain numerous pieces of white shell, which had evidently been carried to the spot." To mention one or two localities remote from the preceding:—On the 12th June, 1835, a nest with eggs was observed on Straw Island (one of the islands of Arran), off Galway bay;† on the 17th of the same month, one was found on the Keroe islands, off the Wexford coast, and the eggs, three in number, were laid on the stems of sea plants, carelessly placed on the top of stones.‡

With respect to fresh water being inhabited by the oyster-catcher, I was assured by the gamekeeper at Shanes Castle, in 1834, that a few of these birds frequent the shores of Lough Neagh at all seasons of the year. A friend, on his return from Scotland in 1832, informed me, that he had seen many of them in July that year about the river Tay above Dunkeld; per-

* Mr. Hewitson's work, in which the eggs of British birds are admirably figured, had not appeared when the preceding remarks were written. The eggs in question partook of the markings of both varieties represented by that author.

† Mr. R. Ball.

‡ Mr. Poole.

haps at the branch of that river, previously mentioned by Dr. Fleming, who found the species "breeding on the islands in the Tummel at Moulinearn, between Dunkeld and Blair Athol."* Mr. St. John, too, states that many breed "far inland, on the stony banks of the Findhorn, Spey, and other rivers."† Montagu imagined that this bird never left the sea-shore.

Sir William Jardine, in a note contributed to his edition of Wilson's American Ornithology (vol. iii. p. 34), gives a highly interesting account of the habits of these birds, when they congregate in extraordinary numbers—"many thousands"—on some part of the British coast; the locality, however, not being named. I have never seen any approximation to such numbers on the coast of Ireland.

THE CRANE,

Grus cinerea, Bechst.

Ardea grus, Linn.

Is an extremely rare visitant.

As has been remarked by Dr. Scouler, in a "Notice of Animals which have disappeared from Ireland during the period of Authentic History:"‡—"The crane (*Grus cinerea*) was formerly so plentiful that, according to Giraldus, flocks consisting of a hundred individuals were extremely common." The words of Giraldus are—"In tanto vero numerositate se grues ingerunt, ut uno in grege centum et circiter numerum frequenter invenies," (Top. Hibern. p. 705.) If the bird meant by Giraldus were the true crane, and not the heron, which is commonly called by that name in Ireland at the present day, the stately bird would seem to have been once as common here as it was in early times in England.

To that country it is now a very rare visitant. It would seem,

* Hist. Brit. Anim. (1828.)

† Tour in Sutherland, vol. i. p. 223.

‡ Journal of the Geological Society of Dublin, vol. i. p. 224 (Part 3).

also, not to have occurred on the mainland of Scotland for a long period; but has, within the present century, been met with in the Shetland islands.* In Smith's History of the county of Waterford, published in the year 1745, the following appears:—"The crane (*Grus*), which is a bird of passage. During the great frost of 1739 some few cranes were seen in this county; but not since or before in any person's memory." The same author, in his History of the county of Cork, published in 1749, remarks that—"The crane was seen in this county during the remarkable frost in 1739; but they do not breed with us."

In March 1834 Mr. Glennon, bird preserver, informed me that a crane, then in the museum of the Royal Dublin Society, and seen by him in a fresh state, was shot in the county of Galway about twenty-five years previously. By letter from Richard Chute, Esq., written in 1846, I was assured that "a crane was shot in Tralee bay, about twenty years ago, by the Rev. John Chute, now rector of Roscommon." My correspondent, though but young at the time, saw the bird:—he states, on the additional authority of the shooters and others, that it was unquestionably the *Grus cinerea*.

This species winters in Africa; and annually migrates to Scandinavia, and other northern countries, for the purpose of breeding.

* Dr. Fleming remarks that "A small flock appeared during harvest in 1807, in Tingwall, Zetland, as I was informed by the Rev. John Turnbull," (Hist. Brit. Anim. p. 97). Mr. Dunn, who has written an "Ornithologist's Guide to Orkney and Shetland," was told that two cranes had been shot in the latter group of islands between the spring of 1831 and 1832 (p. 84). Mr. J. Wolley gives a full account of one which frequented Shetland for three or four months in the summer and autumn of 1848. He adds (in Nov. 1848) that "Several years since one was shot in South Ronaldsha, one of the Orkneys," (Zoologist, Feb. 1849, p. 2353).

THE HERON,*

Ardea cinerea, Linn.

Owing to the many suitable bays around the coast, and the prevalence of water in the island (in lake, river, marsh, &c.), is particularly abundant.

Habits in Belfast Bay.

ON the extensive oozy banks of Belfast bay these birds are very plentiful; and always to be seen except during the time of high water.† At the same view I have remarked numbers stationed singly, like sentinels, along the margin of the flowing tide for miles; and, a little apart, a group of thirty together. So soon as the encroaching waves drive them off the banks, where they are securely beyond the range of gun-shot from the shore, they take their departure; and under various circumstances await the receding of the waters. Some of those feeding on the Down side of the bay go in congregated numbers to the comparatively retired Strangford lough, where they are less disturbed. I once reckoned so many as sixty proceeding thither, at the same time, in a single line of flight. Others take a course as if going right to sea; but they probably reach a quiet haven about the entrance of the bay. The following note tells us how a few dispose of themselves. At Cultra demesne, on the county Down borders of Belfast bay, herons in their elegant light-hued plumage have a very fine effect; and are conspicuous objects from a distance, when perching (as I remarked them habitually to do, in the summer of 1848, during high water) on the dark-foliaged pine and silver fir. These trees form part of an extensive wood, chiefly of oak and other indigestible trees of equal size with the *Coniferæ*, that beautifully clothe

* Vulgarly crane, or long-necked heron.

† Aug. 1849.—The past rather than the present tense should here be used; a change with respect to the herons leaving the bay so generally at high-water as formerly having taken place since a line of railway, extending along a part of each shore, has been opened. As trespassing is not permitted “on the line,” the birds may be seen at high-water, sometimes within half a gun-shot of it when the train passes, without being in the least disturbed. A few days’ experience seemed sufficient to convince them that they had nothing to dread from railway trains or passengers.

the face of a high hill at the opposite side of the highway from the house. A public road runs at the base of this hill; but from it the herons are unseen. They are not, however, driven thither merely by the tide having covered their feeding banks, as I observed a few there at all times of ebb and flow. One evening, twelve rose from a group of three pines, whose foliage intermingled; eight being on one tree, and on the side opposite to the sea. During fine moonlight—sometimes at midnight—their loud hoarse call, when on wing, denoted their flying thence to the bay.

Others, on the Antrim side, betake themselves singly, or often in little parties of three or four, to the demesnes bordering the estuary; until, in some favourite spot, from twenty to perhaps fifty are congregated together. Here they remain, in the centre of large pasture-fields or meadows, out of the reach of gun-shot from any fences, until the tide has sufficiently ebbed; and then usually return, not as they went, but in large parties, sometimes *en masse*, to the bay. A flock of these gigantic birds appears very beautiful when coming silently in view over the banks of fine lofty trees at Parkmount, as I have seen about twenty do in a compact body; and not only continue thus in flight, but alight together on the beach. A few notes may be given at full length.

Nov. 14, 1847.—I was much pleased to-day by observing flocks of herons, curlews, and lapwings (about forty individuals in each—of herons I reckoned forty-two) awaiting the falling of the tide in a large ploughed field at Parkmount, from which the sea is not visible. The flocks kept separate, and were stationed about the middle of the field, so as to be out of shot from the fences. The herons (of which there were beautiful adult as well as young birds), from their colours finely contrasting with the rich brown hue of the upturned soil, appeared to great advantage. They were mostly at rest, with the necks drawn in, and the plumage puffed out so, as to be apparently of huge bulk. All the curlews had their heads turned the same way, just as they appear when awaiting the falling tide on a marine rock; occasionally they gave utterance to their low guttural cry. Nearly the whole of the birds of the three species were perfectly quiescent.

An exception to the heron's mode of return, as described, is indicated in the following note :—*Nov.* 11, 1840. A sun-bright lovely day. When walking for three miles along the Antrim shore of the bay from Belfast, after the tide had a little receded, the birds, which were very numerous near the road, proved extremely interesting. Dunlins and ringed dotterel were flying in little troops, uttering their pleasing cries, and moving towards the great body of not less than a thousand of their species. Redshanks, attracting immediate attention by their loud and lively whistle, appeared most graceful as they alighted, and the handsomely formed wing, flung up so as to exhibit the under surface at the moment they touched the ground, flashed in silvery whiteness upon the sight. The sea gulls, in their snowy garb, were as usual highly attractive; but the herons bore off the palm from all the others. After having been driven from the banks by a high tide, they were returning, now that it had ebbed; and the whole expanse of sky before me was enlivened by their presence. At one view, spread singly over the atmosphere, I reckoned fifty. The many-coloured sky, chiefly blue, with white and rich yellow clouds, against which they were seen, much enhanced their appearance. I have occasionally, though not to-day, remarked the white portion of the heron's plumage to look beautifully roseate, with the rich tints of the setting sun upon it.

In the demesnes alluded to on the Antrim shore, the herons seldom perch on trees—apparently never through choice—by day; but they roost on those at Fort William, &c. during the night.

Instead of the movements just detailed, the following is the practice during neap tides. As remarked on September 20, 1838, thirty-two herons appeared standing together on a small portion of the beach surrounded by the tide (about a hundred yards from the road), awaiting its ebb. An hour afterwards they were nearly all in the same spot, the banks being not yet sufficiently uncovered. On the 24th of the same month, thirty-six of these birds were congregated at the same place during high water, and looked very picturesque. Most of them were motionless; but others, especially those about the edge of their little island, were in various

attitudes to secure their prey; and some of the main flock occasionally gave sign of life by stretching out their necks to see that all was safe. At the same season of the two following years, this habit of the herons was noticed,—the congregated numbers being then increased to fifty, and subsequently to sixty. Apparently through laziness to take wing, herons often allow the flowing tide to wet their plumage considerably before they take to flight. During keen frost, on the 23rd January 1839, when the beach on which they stood was hard frozen, I observed numbers of them, at the edge of the in-coming tide, allow fully the third of their plumage, in a line with the highest exposed part of the tibiæ, to be wetted, the entire “legs and thighs” being at the time concealed from view. On this occasion, however, the mud-banks being hard-frozen, and the air very cold, the flowing tide would have warmed them. In the midst of the breeding season only, are herons, as well as birds generally, scarce in the bay. It then appears quite deserted, no more than one or two herons, perhaps, being visible within the range of a mile. Soon after that season they again make their appearance in numbers. On the 9th of August 1845 I reckoned fifty-two in a close flock when the tide was a considerable way out, and a great extent of banks was laid bare for them. From where they were stationed, to the distance of a mile, not another heron appeared; but there, nearly a dozen were congregated in a compact body. Old birds as well as young were of both parties. A similar note, with respect to numbers and the sociability of the species, was made in Aug. 1847. It is very interesting to observe the good fellowship subsisting among various species of *Grallatores*, by their associating together; but still more so to remark the gregarious habits of birds of different *orders*. I have seen herons—be the reason what it may—when looking out for places to alight, on an extensive range of beach, either select the immediate vicinity of flocks of gulls, or “pitch” in the midst of a flock without disturbing any of them. The scene of the operations here detailed, comprises about two miles in extent on either side of the bay.

The preceding notes may be considered too minute; but they

are illustrative of habits of the species, which I have not seen alluded to in any work. Even in the latest "History of British Birds"—Mr. Yarrell's excellent work—it is remarked that, in winter, seldom more than one heron is seen at the same time and place; the species is also characterized there as gregarious only at the breeding season.

Fishing and Food.

Different statements have been made respecting the heron's fishing time. I have somewhere read of its never fishing by night, not even by the clearest moonlight; an idea which would be scouted by the old women of the north of Ireland, whose favourite prescription for "rheumatic pains" is "the fat of a heron killed at the full of the moon."* That the bird is then in the best condition, is not imaginary; it visits Belfast bay in as great numbers to feed by moonlight as by day, at all seasons of the year. It is not known to come in dark nights. Those who kill the birds for eating (which some very few poor shooters do) consider them only in sufficiently good condition after a duration of moonlight feeding. Taxidermists, too, remark them to be fatter at such times (occasionally very fat) than when killed during "the dark of the moon." Montagu, indeed, has correctly observed that "they feed frequently by moonlight, at which time they become tolerably fat, being not only less disturbed in the night, but it has been observed that fish then come into shoaler waters." I have myself seen numbers of them fishing by moonlight in Belfast bay; and one which I shot in the act had just captured a large *Cottus scorpius*, Linn. (or miller's thumb, as it is here called), notwithstanding its formidable spinous armed head. In another instance, in summer, when greater variety of food is afforded, I saw one of these fish taken from a heron's stomach. Rennie states that he "had never seen an instance of its fishing when

* Pennant makes a similar remark in reference to the great crested grebe (*Podiceps cristatus*), viz.:—"The flesh of this bird is excessively rank; but the fat is of great virtue in rheumatic pains, cramps, and paralytic contractions."

the day was advanced :”* and Mr. Waterton, in his interesting essay on the heron, remarks, and doubtless from correct observation in his own locality, that between sunrise and sunset it is idle ; but that when the shades of night set in, it sallies forth to feed.† The author of the ‘British Naturalist’‡ dwells at some length on the *moral* of the heron not feeding during sunshine ; at the same time mentioning that he was once witness to the bird’s doing so. I have, however, been always accustomed to see these birds feeding at every hour of the day, and at all seasons, in Belfast bay, where they have come most under my observation. In the brightest sunshine, of the forenoon, I have observed herons capture prey in different localities—fresh-water and marine (river Lagan and Strangford lough), and at mid-summer as well as mid-winter.

The following observations were made during bright sunshine :—*Sept.* 10, 1847.—I looked at different species of birds for some time through a telescope, as they fed upon the mud banks opposite Holywood, Belfast bay. *Heron*s, *herring gulls*, *curlews*, and *oyster catchers* were seen feeding within a few yards of each other, and all on similar *ground*, though the prey of the heron was in the water,—little plashy places among the *Zostera*. The object of this note, however, is to record that the heron sees an object, even a small one, in the water at a considerable distance, as proved to-day. The stealthy pace with which it approaches its prey reminded me of that of steady pointers or setters when close upon their game.

The predilection of the heron for fresh-water fishes is mentioned in the instructive work entitled ‘Gardens and Menageries of the Zoological Society ;’ but the numerous herons which frequent the marine loughs of the north of Ireland throughout the year, except at breeding time, are well content with sea-fish ; and much more partial to such localities than to fresh-water lakes.

Mr. R. Davis remarks :—“ If a heron be approached very

* Faculties of Birds, p. 170.

† Essays Natural History, p. 188, 3rd edit.

‡ Vol. i. p. 1 107.

closely when on the watch for fish, or at rest, without alarming it, and then be suddenly startled, it becomes (as I have known to be the case), for a short period, quite helpless, and can even, though rarely, be taken by hand. It tumbles about as if intoxicated, and is unable to rise for a considerable time." This is alluded to in the "Recreations of Christopher North" (vol. i. p. 56), a work full of excellent observation on natural objects, when they are the theme, and which treats of them in an admirably poetical—or, it may be, inimitably grotesque—manner.

Mr. Waterton, as usual, when writing on any bird, enters, in his essay on the heron, into the subject of the good and evil that it does, and considers that the species is grossly maligned when accused of committing extensive destruction in fish-ponds (p. 185). He considers these birds as "making ample amends for their little depredations in shallow waters, by killing rats and frogs," (p. 189). True, if the ponds be sufficiently deep to the edge, the heron, be he ever so well inclined, can do no harm; but that he is a depredator in shallow fish ponds, I had annoying evidence when a boy. A couple of small ponds—purposely made shallow, that the fish might be the better seen—into which I put a large quantity of trout, were discovered by a heron, who, before his presence was suspected, had cleared out my whole stock.

The food of this species, as shown by inspection of the contents of stomachs examined, without any reference to seasons or localities, but just as sent to me by bird preservers, was as follows:—*Nov. 7, 1837.* Weather open and mild. One contained only the remains of shrimp-like crustacea, of which there was considerable quantity; these did not exceed, in length of body, nine lines, or three-quarters of an inch.—*Nov. 18.* Weather mild, as it has been for some time. One exhibited, in addition to the remains of a small cod-fish, several shrimp-like crustacea.—*Jan. 25, 1838.* Severe frost. One presented a good deal of vegetable matter, stalks of plants, &c., with the wing cases of a minute beetle (elytra not exceeding a quarter of an inch in length), also a few pebbles.—*Feb. 27.* One contained an entire lupin-pod, and the head of a boat-fly (*Notonecta*).—*May 3.* One was filled

with the remains of fish; as, on *Dec.* 14, was another with the remains of frogs.—*Jan.* 26, 1839. One exhibited a mass of conferva-like vegetable matter, and portions of water-beetles.* It would thus seem that the food of the heron is often of a much smaller description than we are informed of by writers on the subject.

In February 1839 a heron was picked up by a shooter as it lay helpless, and nearly dead, on the surface of Belfast bay. The cause of this catastrophe was at once apparent,—a large eel having been found sticking tightly in its throat; this fish, twenty-six inches in length, and four and a half inches in circumference at the vent, was rather a formidable mouthful. Its head was partly digested. The bird had probably picked up the eel when standing at the edge of the channel; and being unable to take wing, had been lifted by the flowing tide on which it was seen floating.

Another instance of the heron's falling a prey, apparently, to its intended victim is recorded in the following note:—Lord Castlereagh and the Rev. John Cleland being in company, in the neighbourhood of Portaferry, about the year 1785, were attracted by the violent screams of a heron rising from a marsh, and they paid particular attention to it. The bird kept on wing for a short time, and then fell to the ground; when, on hurrying to the spot, they observed a stoat (*Mustela erminea*) running away; and found the heron dead from a wound which that animal had made in its throat.†

Mr. Yarrell remarks that “if an eel chance to be the object caught, the heron has been seen to quit the water, to make the more sure of his prey by beating it against the ground till it is disabled,” (vol. ii. p. 446).‡ This proceeding I have frequently

* Mr. Poole notes the large water-beetle (*Dytiscus marginalis*) as forming part of the heron's food.

† This was communicated by Mr. Cleland to Mr. J. Montgomery of Locust Lodge, in Aug. 1822.

‡ The 3rd vol. of Yarrell's British Birds, p. 429, contains a note and most spirited vignette of a heron being killed by an eel in a different manner from that above related.

witnessed.* I once saw a heron seize a small flat-fish, and beat it about much longer than seemed necessary merely to deprive it of life, as if annoyed at the poor victim, for presuming to be too inconveniently broad to go down its captor's œsophagus.

Heron as Food.—Mr. R. Davis, of Clonmel, observes, “Hérons when young are excellent eating. By cutting off the wings, tarsi, and head, and making them into *wild-geese*, I have had them cooked us such, and an excellent dish they make, in my estimation, fully equal to grouse; but if not disguised it is hard to have justice done them; so great is the prejudice against eating such *unchristian birds*.” It has also been remarked to me by a friend, that once when dining at Bogay (Donegal), a young heron was served up roasted at table, and proved excellent, the flavour resembling that of hare, as the dark colour of the flesh likewise did. It was not in the least fishy. Another friend, who has eaten of herons in the south of Ireland, remarks, that “they are very variable, occasionally good, but oftener not so.” They are sometimes buried in the earth for several days, with the object of removing the fishy taste.

Heronries.

WITH respect to heronries, it may be stated, that about two miles from Belfast there is a small one at Belvoir Park; a second, ten miles distant, at Hillsborough Park, where about fifty pairs of birds annually build; a third, about twenty miles off, at Seaforde; there are also some nests at Killileagh Castle,—localities in the county of *Down*. In *Antrim*, Shanes-Castle Park is a breeding haunt; and there is a small heronry on the island in a lake at Lissanoure Castle. At Banada, on a branch of the river Moy (*Sligo*) there is said to be one. At Westport

* A gentleman once stated positively to me that he had seen a heron, when flying near the Long Bridge, Belfast, swallow an eel three times, which as often passed through its body, and was again captured before reaching the water. Eventually the bird bore off its victim, and, by beating against a stone, killed it. The belief is common that an eel will thus several times pass through the stomach and intestines of the heron, by which it is picked up again and swallowed. But is not this, in every instance, an optical deception arising from the eel, when all but swallowed, escaping and falling from the bird in such a manner as to lead persons to believe that it has passed through its body. Its doing so may, indeed, be regarded as an impossibility.

House (*Mayo*) we saw a large heronry at the end of June 1834, when the squalling kept up through the evening was incessant, and occasionally, amid the inharmonious din, cries like those of magpies were heard. When passing Bantry House, county of *Cork*, in July 1834, a similar uproar arose from an extensive heronry. From the intelligent gamekeeper here (Geo. Jackson) I learn, that it contained above fifty nests in 1849, and that at Adrigoole Lodge, a summer residence of Lord Bantry's, there is a small colony of eight pair of birds;—also, that at Castle Mary and Macroom Castle there are heronries, about fifty nests having been reckoned at the latter place in 1848: these localities are in the county of *Cork*. My informant mentions another heronry known to him at Frenchpark, county of *Roscommon*, in which, some years ago, when he lived there, about thirty nests were annually built. He remarks:—"In a number of nests that I examined, I have seen young birds nearly full-fledged, birds not long hatched, and eggs in a state of incubation, all in the same nest. In the breeding season of 1847 two young birds at Adrigoole came down into a yard behind the kitchen, and fed on the entrails of fish, &c. that were thrown out. They were observed by Lord Bantry, who liked their confidence, and ordered them to be fed regularly. In a short time they walked boldly into the kitchen, quite regardless of the people present, and were nowise backward in making free with anything they took a fancy to. The whole of the time they were not in the yard or kitchen, they perched on the top of the house. When his lordship left the place they mingled among the rest, perhaps from not being fed, and were not known from the others the succeeding year."

"There is a heronry at Maryborough, the seat of Edward Newenham, Esq., about two miles from *Cork*; and a small one at Coolmore, ten miles from that city. At Prospect Villa, about two miles distant from the latter, a pair of herons has built, for the last four years, in the same grove with rooks. They have occupied different trees during that short period."* At Castlemartyr Park, in the same county, there is a heronry. In the county of *Waterford* these birds build at Dromana; and at Salter's Bridge, near Lismore, there is an extensive heronry, where amid the dark-foliaged trees the white necks of the birds have been remarked to "show forth like flowers."† Respecting

* Mr. Robert Warren, jun.

† Mr. R. Ball.

the last-named county and *Tipperary*, it is stated that there is a well-stocked heronry at Stradbally Castle; that herons breed at Barn within three miles of Clonmel, and at Kilcommon demesne.*

The Rev. Thomas Knox, writing to me in 1837, mentioned a heronry as being in a grove at Mr. Gibbon's, county of *Westmeath*; and at the same time kindly favoured me with the following particulars (communicated to him) in reference to a small heronry in the demesne at Edgeworth's-town (*Longford*):—"There are here (season of 1837) about eighteen nests in one clump of beech trees, and a few detached nests,—in all about two dozen. The birds are on the increase, and forming detached colonies. Early in January a few of the herons return—like rooks, jackdaws, &c., that build in company—to visit and examine their nests, then go away, and about the first week in February all come to remain for the season. They sometimes now collect in a row on the ground, as if holding a council. A pair driven away last year from the main body commenced a nest in a group of trees about a hundred yards distant, and had it nearly completed the next day. There are one or two left on guard at the nests all day when there are young [or eggs?] to keep away crows and magpies, which often collect about the nests in numbers, so that the sentinel herons are kept busy driving them off.† The young are frequently blown out of the nest by storms. In the season of 1838, it was observed, that two herons commenced repairing a nest on the 8th of March, and that several did so on the 10th. On the 24th and 30th of April, eggs-shells were seen. There are generally two broods. The young birds, so soon as able, leave the nest and go out on the branches, where they are fed by their parents."

At Beaulieu, near Drogheda (*Louth*), is a heronry (about thirty pair breeding in 1849), the owners of which are reputed to be great thieves, and to steal young rooks out of the nest to feed their own young upon them.‡ In the county of *Dublin* there is one at Howth Castle (perhaps twenty-five nests), and another, of long standing, at Malahide Castle;—

* Mr. R. Davis, jun., of Clonmel.

† Mr. St. John remarks, that in a heronry in the Findhorn the nests are greatly robbed of the eggs by jackdaws, "which live in great numbers on the rocks immediately opposite the herons."—*Tour in Sutherland*, p. 215.

‡ Mr. R. J. Montgomery;—who obtained eggs from nests there in the middle of Feb. 1849.

thirty to fifty nests. At Marino, the seat of Lord Charlemont, on the borders of Dublin Bay, is an infant colony, first noticed by my informant in 1844, when the nests were but three in number:—in the next year, five; and in the third, ten appeared. At Ballyward (*Wicklow*) there is a very ancient one; which contained, in 1846, about fifty nests.*

Although the “discord of sounds” from a heronry certainly cannot be called “sweet,” I do not know a more interesting feature in a demesne than a finely situated one; as, for instance, that in Hillsborough Park. We find the heronry amid scenery of the most various character, oftenest perhaps in the finely-wooded and cultivated park, having the adjunct of a spacious lake. One in a very different scene, in the island of Islay, will be mentioned; but the most interesting that has in any way come under my notice is on a wooded island (under two English acres in extent; the trees thirty to fifty feet in height), in Lough Athry—a lake about a mile in length—situated perhaps ten miles to the south-east of Clifden, county of *Galway*. So charming was this scene, that it was committed to the portfolios of my friend Robert Callwell, Esq., and Dr. Petrie, during a tour undertaken a few years ago in search of the picturesque in Connemara. Dr. Petrie made an exquisite water-colour drawing of it (38 by 26 inches), which appeared in the Exhibition of the Royal Hibernian Academy for 1846, under the attractive and appropriate title of “The Home of the Heron.” The locality is known to the people of the district by the prosaic name of “Crane Island.”

Immediately beyond an admirable foreground, faithfully representing nature, the lake fills up the picture from side to side, and the wooded island appears with some herons just above the trees, while others are sailing towards it on the bosom of the air from the far distance; every individual, of which there are above thirty in number, being drawn to the life. At the farther side of the lake is a sublime rocky defile, the termination of which is but dimly seen through the clouds enveloping the mountains. Herons are the only living objects represented in the drawing. In addition to those already mentioned as on wing, a solitary bird stands in an attitude similar to the one so admirably portrayed by Bewick, at the nearer side of the lake. A heron is said to have been

* Mr. Robert Callwell of Dublin.

on this island from time immemorial. At the period of my friend's visit it contained at least fifty nests.

This picture (which is the property of Mr. Callwell) is remarkable for unity of treatment throughout, and for high poetical feeling, in both of which Dr. Petrie eminently excels. It is much to be regretted that his drawings, so original in their character, are little known out of Ireland. To those who have not seen any of them, and are acquainted with the productions of the English masters in water-colours, it may be observed, that Petrie's style approximates to that of Copley Fielding more than to any other; both artists being remarkable for a depth of fine poetical feeling in their treatment of landscape; and the productions of the former being further characterized by extreme correctness of detail both as to form and colour. Remarkable effects, too, such as Turner delights to pourtray, have often been represented in—indeed have formed the subjects of—Petrie's admirable drawings.

The heronries which have been named give no idea whatever of the number in Ireland; being only such as I have happened to hear of and note down.

Already, in a letter from Mr. Knox, some of the circumstances of a heronry are detailed; but two or three casual notes may here be added.

On the 19th of Feb. 1832, I observed that a pair of herons had completed their nest in Belvoir Park, where they are less gregarious than usual, and build in different parts of the demesne. Although this richly-wooded park is bounded on one side by the river Lagan, and contains a spacious sheet of water, partly bordered with lofty trees, in which the herons chiefly build, they have occasionally selected other places remote from any water. In 1833 a group of lofty beech tree half a mile distant from both lake and river was chosen, on the very topmost branches of which, five of their nests appeared, and hence were completely exposed to "the pelting of the pitiless storm." The structure of the nest too (as well remarked by Mr. Poole) "is so very open, that the whole outline of the sitting bird can generally be distinguished from the ground." Birds of such bulk look comical on the light topmost spray of the beech, especially on windy days, when it is very amusing to observe them balancing themselves on the limber twigs. Now, by raising one of their wings, and the next moment both, they succeed wonderfully in keeping their position, and remind the spectator of the performances of a rope-dancer, in which the arms are

much called into requisition for the same purpose. The attitudes of the bird, however, if not surpassing those of the rope-dancer in grace, certainly do so in grotesqueness.

A colony of herons, as I have been credibly informed, built regularly *on the ground* in a low stony islet at lough Achery, co. of Down—a narrow river-like sheet of water about a mile in length—until about half a century ago, when they were beaten away by black-headed gulls (*Larus ridibundus*), which coveted their isle as a breeding haunt. The conflict between the two species was said to have been very great, and if a heron afterwards appeared in the vicinity, the colony of gulls sallied forth to attack it. I had the unexpected pleasure very recently (1849) of finding, in Mr. Templeton's journal, the following entry on this subject:—"June 29, 1808. The Rev. J. Dubourdieu relates that, on an island in a small lake, called lough Achery, about three or four miles south-east of Lisburn, herons, contrary to their usual custom, had bred on the ground; but about the year 1803 a number of black-headed gulls drove off the herons, and have continued to breed there since." They did so for several years after that note was made, to the number of many hundreds, their nests almost covering the whole islet. From a person who visited the lake in July 1845, to make inquiry respecting its ornithology, I learned, that for at least a dozen years previously the gulls had not bred there. This was attributed by some persons to the persecution of grey crows (*C. cornix*), which breed on another islet of the lake that is wooded. Although this might be considered only proper retributive justice, the absence of the gulls is probably owing to a more potent cause;—to persecution by being often fired at and otherwise disturbed. The presence of a boat, too—which was kept constantly on the lake—would much annoy them.

Sir William Jardine has remarked respecting herons:—"of their breeding on the ground we have the fact stated, but we cannot trace it to anything authentic."* I was therefore highly gratified by hearing, when in the island of Islay in January 1849, that there is a small but long-existing heronry there on the ground, consisting annually of about a dozen nests. On the 15th of the month I visited this heronry, which is not more than three miles from Ardimersy Cottage, where I was staying. It was difficult of discovery, from being amid brushwood and much broken rocky ground of similar character; and I might have been long hunting for the exact site, had not six or seven herons, by

* Brit. Birds, vol. iii. p. 125.

rising from the heath, guided me to the spot. The locality is at the sea-ward top of a bank varied by rock, greensward, and heath, and rising somewhat precipitously to the height of perhaps eighty feet above a beautifully secluded little inlet of the sea. The nests are built on the ground about the roots of large plants of heath, and are formed of pieces of light stick. Three of them are about two and a-half yards distant from each other. They are all perfectly accessible to any person walking over the ground; but fortunately the birds are not disturbed when breeding. There is a profusion of low natural wood, chiefly birch and hazel, quite contiguous; the birch twelve to fifteen feet high, and some alder trees of twenty feet are near at hand. A quarter of a mile distant is a hill side covered with indigenous trees of larger size; twenty to twenty-five feet in height. Yet this is the heron's only breeding place on the eastern quarter of the island. The birds are said to frequent the site on stormy days throughout the year, flying to it when the wind blows strong upon the neighbouring shore.*

I was told of a similar heronry in the grounds at Islay House, and went to see it; but found instead, that the nests were all in trees; larch, ash, &c. about twenty feet high; the nests themselves being from twelve to fourteen feet above the ground. There are perhaps a dozen of them. This heronry adjoins a small rookery, the inhabitants of which are often seen to attack and drive them off, the herons flying before them without resistance. The proximity of the breeding places of the two species is singular in this instance, as there is a great extent of continuous plantation precisely similar as to species and size of trees, as well as other features. The rooks are said to have commenced building there before the herons. This and the heronry already noticed are stated to be the only two breeding places of the species in Islay.

Although it certainly is not friendship for each other that brings the two species together, yet in the summers of 1847 and 1848, at Coolmore near Cork, two pair of rooks and a pair of herons built

* Since the preceding was written, Mr. St. John has published the following note:—"I was told of a singular heronry situated on a lake between the Oykel and the inn at Altnagalcuanach, where the herons breed in great numbers on the ground in an island on the loch."—*Tour in Sutherlandshire*, vol. i. p. 15 (1849.) Though the heron is common everywhere in Sutherlandshire, this is the only heronry of which the author had heard, (p. 138.) Mr. St. John, in his former work—'Wild Sports of the Highlands,' describes a heronry on the high cliffs near Cromarty, where some of the nests are "built in the clusters of ivy, and others on the bare shelves of rocks," p. 123.

even in the same tree, a fine old ash, although other aged trees were adjacent, and a rookery and heronry were only two fields distant. When the herons would fly off the tree the rooks pursued and even struck them on the back until they screamed; but when these birds alighted on their nest, the rooks dared not go near them. The progeny of both species escaped from this tree in safety.*

The following mode of flight is sometimes witnessed at the heronry as well as elsewhere. To use the words of Mr. Poole, "The appearance of the heron, ascending by repeated gyrations in the air for the purpose of attaining a sufficient elevation, is exceedingly beautiful. The circle described in this manœuvre is small—perhaps not more than thirty yards in diameter—yet continued exertions quickly elevate the bird to an immense height, sometimes almost beyond the reach of vision. The flight at such times resembles that of the eagle—the king of birds—as he climbs the sky." To this may be added, that the heron's manner of descending from a great elevation in the atmosphere, by rapid and almost perpendicular swoops, is only less interesting than his ascent.

A heronry is most graphically introduced by Hugh Miller in his eloquent description of a scene in Morayshire.†—"Old Red Sandstone," p. 217, 1st edit. and p. 254, 2nd edit.)

The Heron's Cowardice, &c.—The persecution of a heron (supposed to have young at the time) by a sparrowhawk, will be found noticed under the latter species (vol. i. p. 67). The poor heron is also sometimes assailed when flying innocently above the nests of other birds. One flying closely over the rookery at Belvoir Park in my presence, brought a bevy of rooks against him; but they all soon returned, except one which followed the heron for some way. Against this bird he showed no fight; but presented a most cowardly appearance, when doing all in his power to avoid being struck by his assailant.‡ Goldsmith, in his 'Animated

* Mr. Robert Warren, jun.

† An excellent account of a visit to a heronry has been recently published by Mr. Knox, in his "Ornithological Rambles in Sussex," p. 20—35.

‡ The result of a pair of herons building in a rookery will be found in vol. i. p. 319, under Rook.

Nature,' remarks of the heron :—" Armed as it appears for war, it is indolent and cowardly, and even flies at the approach of a sparrowhawk. It was once the amusement of the great to pursue this timorous creature with the falcon." The heron, however, appears in a different light in the following note of a scene witnessed through a telescope by an accurate observer living on the shore of Belfast bay. A herring gull having caught an eel of about a pound weight, showed evidently by its manner that it did not well know what to do with so large a "quarry." Two more of its species having joined the captor, the three together appeared quite perplexed; which, being perceived by a great black-backed gull, he flew to the spot, and the others took their departure, leaving the prey behind, but kept looking back from a respectful distance. The *Larus marinus*, standing on the same spot all the while, with great dignity struck the eel on the head twice or thrice, and with a long pause between each blow. A heron perceiving what was going on now appeared on the scene—in an instant made the eel its own, and swallowed it. When this bird arrived, the great gull walked majestically off to the distance of a few paces, arched his neck, and stood, the picture of offended majesty. Being the king of his own tribe upon our coasts, why should he not, like other potentates, take umbrage at such an act of spoliation! It will be seen in the next section, that the heron, in a domestic state, is the reverse of cowardly.

Hérons in Confinement.

Mr. R. Davis remarks :—" I have frequently had herons in confinement, and been much amused at their behaviour. Old birds generally refuse food. I always fed them per force, and then tied up their bills to keep them from disgorging, at which they are quite adepts. Even when in some degree tamed, and become free feeders, if you frighten or approach them closely soon after a meal, down goes the bill to the ground, and the contents of the crop are displayed to view in an instant; though if you walk away you find that, like the dog described in scripture, they 'return to their vomit again.' This they will continue to do with the same meal as often as you like to cause it."

Heron is not to be trusted where young fowl of any kind are accessible to them. One correspondent reports several young wild-ducks to have been killed and eaten;—another mentions a young heron which, though regularly well fed, killed and ate at different times some chickens three weeks old. This bird, about two hours after having fed on the entrails of a couple of fowls, attacked a young turkey a month old, which it endeavoured to swallow whole, but in vain. A servant having witnessed the assault hastened to the turkey's rescue; in endeavouring to save which, he dislocated the neck of its assailant, thereby causing the heron's death. Its intended prey, owing to the injury received, lived only two weeks after the attack. This heron struck viciously with its bill at dogs, hens, or any living objects, except man himself, that came within its reach. It one day consumed, though not at a single meal, a haddock of 4 lbs. weight. Another bird has eaten three or four full grown rats successively. Indeed the heron proves sometimes useful in captivity by killing these animals, and is often serviceable as a mouser, watching, more patiently than a cat, at a mouse-hole until the animal appears, when it is seized and swallowed on the instant.

Three young herons, taken from a nest in Hillsborough park in 1848, came under my notice.* The nest contained a few young perch about four inches in length; eels much larger were in another nest, doubtless in both instances as food for the young, though these were but a few days out of the shell. The nestlings had the irides of a yellow colour, though not just so bright as those of the adult bird. In this respect they differ from such native gulls as have yellow irides, these birds having them dark in youth; towards maturity they become gradually lighter. When any person disturbed the large basket in which these herons were kept, they pecked fiercely at him, uttering at the same time a loud and angry cry, which instantly, on any food being offered, was changed to a kind of soft *clicking* note.† Fish and flesh-meat were given to them; and when three weeks old they would swallow, at one gulp, a full-sized pollan—a fish as large as a herring—which was

* Four eggs are generally laid. The young of the first brood here were out on the branches, and nearly as large as their parents at the end of May.

† A friend describes the cry of the heron in its breeding haunts to resemble in part the word *clatter* gutturally uttered.

much thicker than their necks. If much teased they would disgorge the fish.

The following notes, by Robert Warren, jun., Esq., refer to a heron taken from a nest in 1847, and kept at Castle Warren, co. Cork:—"The favourite food of this bird is eels; but any other fish will do as well. It frequently swallows four or five large herrings at a meal. Flesh-meat, the entrails of fowls, &c. suffice as food. After feeding, it is very fond of basking in the heat of the sun, and will stand for hours with its wings expanded enjoying the genial warmth. The bird is much attached to me, as I always feed it, runs towards me shaking its wings, and keeping up a cry evidently of pleasure. It evinces much gentleness of disposition, and frequently stands caressing me with its bill. But to strangers its manners are very different, as it attacks them with the greatest fury, and although repeatedly driven back will continue to return to the charge. It shows great antipathy to dogs, and if one comes too near he is received with a stroke of its bill, which sends him yelping away. I have often seen it fighting, although only on the defensive, with a domestic cock. It was never wounded by that bird's spurs; for when attacked the heron stands quite steady in the attitude in which it waits for prey, always facing, and closely watching every movement of its adversary, and striking him with its bill whenever he comes within reach of its long neck. When the cock flew upwards he was always driven back by a stroke of the heron's bill. The cock, in general, retreated on finding that he could make no impression on his watchful foe. The heron beats the cock by wearing out his patience, as it will remain for any length of time in an attitude of defence. The patience of a score of cocks would be worn out by this bird. During two months that I was absent from home, about the end of 1848, the heron would not become familiar with any one, not even with the person who fed it; in fact it never was friendly with any one but myself. On my return after the absence alluded to, it recognised me instantly, and testified its joy by screaming and flapping its wings. It never, indeed, uttered a sound at the presence of any other person."

Another interesting account of a heron has been communicated by Dr. J. D. Marshall of Belfast, who states:—"In the summer of 1848 I received a heron about a week old. It was then partially covered with down, particularly on the head, where a crest was placed at least an inch and half in length. The eye was very striking—the iris being

a beautiful lemon yellow. The body of the little creature was so bare of plumage as to resemble a bladder well filled with some dark-coloured matter. The neck, legs, and bill appeared larger in proportion to the age of the bird than they were in the adult heron. Its appetite, even at that early period, was most voracious, and it snapped at everything placed within reach. To keep it from choking itself I had to place the captive in a deep basket, the top of which was covered with flannel, having a hole through which the head was allowed to protrude, and where it gradually became very comfortable. It was quite powerless on its legs. Fish and pieces of flesh were greedily devoured, until it was completely gorged. Its harsh grating cry was kept up without intermission, unless plenty of food was before it. The increase in its size was astonishingly rapid, and ere many weeks elapsed it was walking about fully half the size of the adult bird. I spent about two months of the autumn at Holywood, to which place it was removed, and kept there in a small yard attached to the house. Early in September it was almost ready for flight, being not unfrequently detected upon the top of the wall, and having made two or three successful attempts to get over it. Its plumage now resembled that of the adult in colour and markings, the dark spots down the neck becoming daily more distinct. In September we removed to town, and our bird with us; and it has remained there in good health until the present time (April 1849).

"This heron has become a great pet with me. I never go into the yard that it does not come up calling for food; and should I not respond to the call, it makes a most singular snapping noise with its bill, and lays hold of my trowsers or shoes, as if coaxing me to attend to it. With myself only, however, is it so companionable; for if a stranger enters the yard, or even female servants, it either avoids them altogether, or, what is much more commonly the case, attacks them more or less fiercely. A hostler being given admittance to the yard for water, the first morning he came the heron observed him enter, and at once set up his cry of defiance, stalking after the man, and finally seizing him fiercely by the clothes. The poor man was unable to get to the water-barrel owing to the heron's pertinaciously snapping at him when he attempted to draw the water. Hearing an outcry in the yard I went out, and it required all my influence, aided by a large stick, to keep the man safe from his attack.*

* When visiting the Zoological Gardens, Regent's Park, London, in the summer

"He is almost equally fierce with some fowls kept in the same yard, always biting them when within reach, and sometimes so wickedly as to injure them. Two chickens he killed in this manner, and a fine duck owes the loss of an eye to the heron. He is now nearly as good as a watch dog,—sets up his hoarse cry when any stranger, be it man, cat, or bird, invades the premises. I keep some pigeons in the yard, and one evening I observed, at roosting time, that not one of them was in the boxes where they should have been long ere dusk. The heron was stalking up and down with his neck stretched to the very utmost, and his eye wandering about in search of some object. As cats very frequently come into the yard, I at once thought that one of them had pounced upon a pigeon, and that this had put the rest to flight, and annoyed the heron; but in a minute or two afterwards I learned that a white owl had dashed against the back parlour window, and on recovering itself from the shock had flown off across the roof of the office-houses. This at once accounted for the activity of the heron, and the flight of the pigeons. It is not particular in the choice of food; fish, flesh, or fowl never comes amiss; the flesh it will eat either in a raw or dressed state. It would be wholly out of my power to describe the beauty of its attitudes; and it is only by seeing a bird as I have seen this one, that a correct opinion can be formed of the grace or beauty of the heron's movements. The curvatures of the neck are most graceful. I have gazed with delight for several minutes upon this bird, as he stood even on the edge of a water barrel, poised on one leg, his head and neck bent down between the shoulders, and more resembling a piece of statuary than a living being."

Callosity. Plumage.—The foot of a heron (shot in a wild state) exhibiting a singular round horny excrescence, has been kindly sent to me by Mr. R. Davis, of Clonmel. This is an inch in diameter, and situated at the side of the middle toe, the upper surface exhibiting scales, some of which are very large; the base being similar to the under surface of the toe. Fully three-

of 1849, I was reminded of the boldness of this bird by that of a hooping crane (*Grus Americana*). A workman having entered the spacious enclosure in which the birds of this family are kept, and having set about arranging two or three stones, this bird very jealously stood close to him watching every movement, and evidently ready on the instant to give battle if anything displeasing to it were done. On another day, a gentleman who entered the enclosure, and was looking quietly around, had to protect himself with his walking-stick against the assault of one of these cranes.

quarters of an inch of its depth are below the sole of the foot. Similar callosities not unfrequently occur in various species of birds kept in confinement.

The gentleman just named has remarked to me—"With so common a bird as the heron it is curious how very seldom one sees an adult: they seem to get sense with their age. Of some dozens which have been sent me within a few years, there were but two adults." Different writers—among others, Montagu, whose observations are generally so accurate—remark, that the adult female differs much from the male heron in plumage. But several of both sexes, set up in the summer of 1848 by the taxidermist to the Belfast Museum, exhibited no difference from each other. The females had "the black and white feathers on the head," equally long crests, with the scapulars and feathers on the breast as long and loose as in the male. In these cases the sex was determined by dissection, and eggs were found in some specimens. The soiled state of the plumage on the lower parts of the body late in the breeding season indicated the females previous to dissection.

"*Migration?*" *Distribution*.—Mr. Bennett, in his work illustrative of the 'Gardens and Menageries of the Zoological Society,' remarks, that "herons may be regarded as birds of passage; but their stay or departure seems everywhere to be regulated by their means of procuring food," p. 139; * * * "as soon as the frost sets in they begin their migration to the southward," &c. p. 140. In the autumn of 1832, Captain Fayrer, R. N., then commanding the mail steam packet between Portpatrick and Donaghadee, observed herons frequently crossing the Channel from Scotland, which they commenced doing earlier than other birds (lapwings, larks, or starlings); but to the north of Ireland they are quite constant, no degree of frost ever driving them from the sea-shore.

Over a wide portion of the continent of Europe the heron is to be seen just as in the British Islands. In the summer and autumn of the year 1826, I met with it generally from France and Holland through the intervening countries to the south of

Italy—and in 1841, eastward to Constantinople, where several appeared, and were remarkably tame (as all birds are there from being protected by the Turks), between the city and the Valley of Sweet Waters. The writing down of this locality, reminds me that, some years ago, when sailing up the noble river Blackwater from Youghal to Lismore, a number of herons (probably awaiting the falling of the tide) were singularly studded over a part of the high and heathy banks of the river, just as the picquets appeared guarding the hills around the summer palace of the Sultan, in the Valley of Sweet Waters, lest any profane eye should behold the ablutions of the ladies of the harem, when (at the end of May) with their lord, sojourning there to enjoy bathing in the natural stream.

The heron is most poetically descanted on in connexion with its wild haunts, by Professor Wilson,* and its picturesqueness is duly appreciated in the writings of those ardent lovers of nature, Mr. Selby and Sir William Jardine.

THE PURPLE HERON,

Ardea purpurea, Linn.

Is stated to have been once obtained in Ireland.

To my brief record of the occurrence of this bird, published in the Proceedings of the Zoological Society (1834, p. 30), I am unable to add anything. It was simply to the effect that a specimen of the purple heron, marked on the “stand” as “shot at Carrickmacross,” and further stated by Mr. Glenmon, bird-preserver, Dublin, to have been received thence by him in a fresh state, had come under my notice. It is in the possession of Mr. Warren of that city, and belonged originally to the celebrated collection of Mr. Harrington. The specimen is in the plumage of Bewick’s purple-crested heron.

In a café at the Caravan Bridge, Smyrna, I saw, in the summer

* ‘Recreations of Christopher North,’ vol. i. p. 53.

of 1841, a most interesting pet bird of this species, appropriately called there *Camelo-poulo*.

The purple heron has many times occurred in the eastern and southern counties of England; but is only known to have visited Scotland once.* It seems not to range northward on the European continent.

THE EGRET,

Ardea garzetta, Linn.

Is of extremely rare occurrence,

MR. R. BALL, Director of the University Museum, Dublin, has kindly copied for my use the following entry, made in the 'Donation Book' of that institution.—“Dec. 1788. Rev. J. Elgee, Wexford, presented a bird of the species called the small white heron, whose present existence in the British Islands has been doubted.” The specimen is now gone; but the remark—“whose *present* existence, &c.”—leaves no uncertainty on my mind that the *A. Garzetta* is meant. The allusion is probably to Pennant's British Zoology, published in 1776, where it is remarked of this species—“We once received out of Anglesea the feathers of a bird shot there, which we suspect to be the egret; this is the only instance, perhaps, of its being found in our country. That formerly this bird was very frequent here appears by some of the old bills of fare, &c.” (Vol. ii. Appendix, p. 536.) Pennant adopts the name of egret for this bird; but “little white heron” is his first quoted synonym. The name used in the Donation Book appears in Willoughby, under the head of “Lesser White Heron, *Ardea alba minor*,” where it is remarked:—“The second lesser white heron of Aldrovandus is the very same with this,” with the addition respecting the latter species:—“This, I say, is without all doubt the same with our *small* white heron; neither (as I judge) doth it differ from the *Garzetta* of Aldrovand,” p. 280.

* A notice of this one, shot in Aberdeenshire, about the beginning of March 1847, appears in the *Zoologist* for July 1849, p. 2497, by the Rev. James Smith.

Templeton notices "a specimen in the Dublin Museum, which was shot in the harbour of Cork in 1792." In the edition of Pennant's *British Zoology*, published in 1812, it is stated, that "one was shot in Ireland in 1793," vol. ii. p. 21. A note made by Mr. R. Dowden, many years ago, when he was connected with the Royal Cork Institution, states, that an *Ardea garzetta*, which came fatigued to Kerry, was shot there, and presented to the institution by Colonel Godfrey. It is added, that Mr. Charles Carrol had informed him of another individual procured at Myrtleville, and sent to the Royal Dublin Society.

Very few egrets have been obtained in England, and none in Scotland. (*Jard. Macg.*)

THE GREAT WHITE HERON.—*Ardea alba*, Linn, which is about equally rare with the egret in England, is not known to have visited Ireland. Nor was it *proven* to have been met with in Scotland in 1842, when Sir William Jardine's third volume on British Birds appeared. See p. 135.

The *Ardea bubulcus*, Cuv. (*A. russata* of British authors*) cannot be placed in the Irish catalogue; but, according to the views of Schlegel, may be the species included in the English one, from the occurrence of a single specimen.

On the 29th of April, 1841, one of the officers of H.M.S. *Beacon*, brought me a bird of this species, which he had just shot in a marsh bordering the bay of Navarino. When walking over the now desolate island of Delos, on the 1st of June that year, I raised a small white heron, with a buff-coloured back, which was believed to be specifically the same. Such also I conclude is the heron—"reddish-brown on the back; cream-coloured elsewhere"—described to me by Mr. Wilkinson, jun., Vice-Consul at Syra, as announcing, by its call, the arrival of the quails, which it always accompanies to that island, on their autumnal migration to the southward;—both species are said to remain only one day in Syra.

* See Schlegel "Rev. Crit. des Oiseaux d'Europe," p. 102.

THE SQUACCO HERON,

Ardea comata, Pallas.,, *ralloides*, Scopoli.

Has been once obtained ;

A SPECIMEN having been shot in Killeagh Bog, a few miles from Youghal, on the 26th of May, 1849. To Dr. J. R. Harvey of Cork I am indebted for all the information which I possess respecting it. The occurrence of a rare bird of this family being communicated to that gentleman by Mr. Samuel Moss of Youghal, who preserved the specimen, a description of it was requested, the perusal of which led to the belief that it must be the squacco heron. The bird was kindly sent to Cork for Dr. Harvey's examination, and the following result communicated to me:—"It is undoubtedly the *Ardea ralloides* ; the descriptions and measurements (as closely as I can test them by comparison with a mounted bird fixed in a case) are so near as to leave no hesitation in the matter. The only difference between the specimen and the descriptions in Temminck, Yarrell, and Jenyns, worth noticing, is, that the belly is not *pure* white ;—it has a good deal of the buff tinge anteriorly and along the sides. The plume of feathers, which have the little *terminal* bordering beautifully marked, are from three to four inches long : perhaps they are not fully grown. I should suppose the bird to have been adult ; its length was eighteen inches. The sex was un-noted by the preserver." This bird was probably one of the same flight, or influenced to migrate farther westward than usual by the same causes which induced the species to visit the extreme portion of England, in that direction, in May last. Mr. E. H. Rodd, of Penzance, records his having seen three of these birds in the course of being preserved, on the 15th of May, 1849 ; two of which were shot near the Land's End, and the other—while perched on a tree—in the parish of St. Hilary, Cornwall.*

* Zoologist, July 1849, p. 2498.

Several examples of this species have been killed at various times in England, chiefly in the southern and eastern counties; but not one has yet been observed so far north as Scotland.* Like the three species of *Ardea* already noticed (*A. garzetta*, *A. alba*, and *A. russata*), this bird is a native of more southern climates than the British Islands, though occasionally wandering so far north. The squacco heron chiefly frequents the warmer parts of eastern Europe and western Asia—also the north of Africa.†

THE LITTLE BITTERN,

Little Heron.

Botaurus minutus, Linn. (sp.)

Ardea minuta „

Is a very rare visitant.

THE first individual of this species killed in Ireland, that came under my observation (as recorded in the Proceedings of the Zoological Society for 1834, p. 30) was an immature bird—in the plumage of the young after the first moult, according to Mr. Selby's description. It was shot in the county of Armagh in November 1830, and sent to my friend, William Sinclaire, Esq. of Belfast, who preserved it for his collection. An intelligent sportsman, on seeing this specimen, assured us that a bird which he had observed in spring some years before at the bog-meadows, near Belfast, was of the same species. He described it as rising from the ground almost perpendicularly when sprung, and descending again in a similar manner. Another gentleman, who saw the specimen in 1833, at once recognised it as identical in species with a bird which he had shot a year or two previously in the county of Kerry. Mr. T. W. Warren, of Dublin, possesses an *Ardea minuta*, which was shot about the year 1833 in the county of Longford.

* Jardine.

† Schlegel.

In 1837 that gentleman told me of his having, some years before, seen one in a fresh state which was shot at Merrion, near that city; and preserved for Sir William Homan. Mr. Glennon states, that the little bittern has been more than once killed in the marsh at Sandymount, near Dublin. Dr. Harvey of Cork informs us, that an adult male bird in his collection was shot in the summer of 1842, at Woodside, by Mr. Robert Parker, and that the Rev. Mr. Stopford had also killed one in that county.* About the 1st of May, 1849, one was shot by an officer of the 9th regiment in a bog between Newry and Dundalk.†

This bird has visited Ireland more frequently than any named in these pages subsequent to the common heron, and may therefore be supposed to be of more frequent occurrence in England. Such is the fact. Although not procured on the mainland of Scotland,‡ one has been killed in Orkney.|| The little bittern has migrated so far north as Sweden, on the continent of Europe.

THE BITTERN,

Botaurus stellaris, Linn. (sp.)

Ardea „ „

Once common in Ireland, is gradually becoming scarce, owing to the drainage of the bogs and marshes.

It therefore seems desirable to me, in a statistical point of view, that such information as I possess on the species should be given in detail. I shall arrange my notes upon it according to localities, and not to dates, beginning with the northern province.

DOWN.—Harris, in his History of this country, published in 1744, remarks that “the bittern is common in the Lower Ardes, about Magheralin, and other places.” In 1833 I made a note to the effect that within the preceding ten or twelve years I had known about six bitterns to have been obtained in the county of Down, all of which

* Fauna of Cork, p. 12.

† Mr. R. J. Montgomery.

‡ Macgillivray, 1846.

|| Fleming.

were preserved but one, that in pursuance of the custom of the olden time was served up at table.* Three of these were killed within five miles of Belfast;—at Holywood Moss, Dundonald (Nov. 5, 1824), and Conswater Point,—the last locality near the town. Another was procured at Killileagh (Nov. 1826), and one or two were at Killinchy. In August 1836 I was informed, by the gamekeeper at Tollymore Park, that a few years previously three or four bitterns frequented the bogs at the base of the mountains in that quarter during a winter. About the same time one was killed at Kirkiston *flow*, in the Ardes. In the winter of 1837–38 one was shot near Downpatrick, a few years before which time several of these birds had been killed there in the course of a winter. A bittern, sent on the 12th Dec. 1838 from Portaferry to Belfast to be preserved, came under my inspection; its stomach looked amazingly large, containing, as it did, a rudd (*Leuciscus erythrophthalmus*) eight inches in length, and two and a half in depth. With the exception of the head, this fish was quite perfect and unchanged in colour. In addition to it were the remains of another fish, and of a full grown frog; likewise the head of a boat-fly (*Notonecta*).—On Nov. 24, 1841, I saw a beautiful specimen of this bird, which was also shot near Portaferry; the greater portion of an eel, which, when perfect, must—according to the bird-preserver—have been about two feet in length, was found in its stomach.—March 1, 1845. A male bird, shot at Tullygirvan, came under my notice; it weighed 3 lbs. 13 oz.; the stomach contained the remains of five or six full grown frogs. — ANTRIM, Jan. 27, 1811. One found wounded in the bog meadows, near Belfast, was taken to Mr. Templeton.—8th Feb. 1838, a recent specimen killed at Claggan came under my examination; its stomach was filled with the bones of full grown frogs.—In Feb. 1839 another was shot near Ballymena. — DONEGAL. Mr. J. V. Stewart, in his paper on the Birds, &c. of this county, published in 1831, remarks,—“I am informed that bitterns were very common in this county thirty years ago; from increased cultivation and population they are now, however, very rarely to be seen.” In a letter subsequently received from that gentleman, he mentioned having met with only two pair of them, one of which frequented, in the breeding season, an inaccessible marsh at the borders of a lake near Milford. From the constant resort of the birds to the

* In a fashionable quarter of London, some years ago, I remarked a bittern exposed for sale during a fortnight without meeting with a purchaser, and the bird had at last to be thrown away.

place at that period of the year, he believed it to have been selected for their nest. One of them was wounded by a person employed to procure birds for his collection; but it escaped, and they both from that time forsook the haunt.—LONDONDERRY. Wm. Ogilby, Esq. informed me, in 1845, that about twenty-five years previously, he commonly, when walking in the calm, still, autumnal evenings, in the neighbourhood of Dungiven, heard the bittern boom from the marshy and grassy hollows. The sound he always considered to proceed from a bird on the ground. Of late years he never heard it. The species is there called *bog-bluitier* [bleater], as the snipe is *heather-bluitier*.—FERMANAGH. A statement similar in all respects to the last has been made to me by a gentleman in reference to this county.—ARMAGH. One killed at Loughall, in Oct. 1842, was kindly sent to the Belfast Museum by Mr. John Nicholson.

WESTMEATH. A few years ago bitterns frequented the margin of a very deep lough in the middle of the bog called Loughnabrone, near Tyrrel's Pass. They may do so yet, as the place is very rarely visited, and the ground so soft and dangerous as to be seldom accessible. One wounded here in the wing was kept for several years at a place in the neighbourhood, and had liberty to walk about the house. It was particularly wicked, and was in the habit of standing somewhat in the way a heron does, apparently asleep, with its head and neck covered up; but if any one approached, it suddenly shot out its head with great violence, always directing its aim towards the eye of its disturber.*—DUBLIN, &c. In the winter of 1830–31, bitterns were much more numerous than usual here, and in the neighbouring counties, whence they were sent to the metropolis. Many of them were exposed for sale in the market. In the last week of Dec. 1844 eight fresh specimens were seen, by Mr. R. Ball, in the shop of Mr. Glennon, bird-preserver; others were in the market there about the same time. In the winter of 1848–49, they were also unusually numerous; five were sent to Dublin during one week in January to be set up.†—KILDARE. The late Archdeacon Butson, about thirty years ago, has killed two or three bitterns in the course of a day's shooting in the Bog of Allen: one wounded by this gentleman lived two years in his garden. In 1842 I was told that the species continued to breed there.—QUEEN'S-COUNTY. Some years ago a bittern was observed by a gentleman of my acquaintance during a walk near Portarlington.

* Mr. H. M. Pilkington.

† Mr. R. J. Montgomery.

ROSCOMMON. Mr. G. Jackson (now gamekeeper to the Earl of Bantry) shot a bittern, on the 30th August 1832, in a rushy swamp about the middle of a bog near Belanagar. The pointers followed the scent for a very considerable distance, so that the object of their pursuit was thought to be an old cock grouse, until it rose on wing. Another was shot by him in a young plantation at Frenchpark in the winter of 1836-37, when there was much snow on the ground.—MAYO. A friend has often seen bitterns in the early spring—four or five in a day—from the year 1838 to 1843, in Muckanagh bog, on the shore of the lower lough Conn. The place was inaccessible to shooters in winter from being always flooded. The author of the 'Wild Sports of the West' describes, in his usual graphic manner, his shooting a bittern in the wilds of Connaught, about Ballycroy, and remarks that the species is now "extremely scarce;" an observation which will, I believe, apply generally to the more western and wilder parts of that province; but about Portumna, on the banks of the Shannon, co. GALWAY, I was told, a few years ago, that bitterns are killed every winter.

CLARE. Until the year 1836, at least (when the information was supplied), bitterns were stated to be not uncommonly on sale in Ennis market.—TIPPERARY. A few years previous to 1842 (when the circumstance was communicated), Mr. R. Davis, jun., received for his collection a female bittern, which was shot early in August, about three miles from Killenaule, when rising from her nest; the young birds were at the time unfledged. The species was then considered to be very rare in the county; but it was added that "a winter rarely passes over without one or more specimen being shot." In the season of 1840-41, a bittern was killed near Cashel; but none was known to have occurred in the following winter.—WEXFORD. Mr. Wheelock (bird-preserved) mentioned, in Nov. 1841, that three of these birds only were known to him as having been procured there. In the winter of 1846-47, one was obtained (Poole).—WATERFORD. Dr. R. J. Burkitt of Waterford, in a letter dated Nov. 19, 1841, observed that bitterns are not uncommon there, and that he had seen eight which were killed in the county within the preceding six years. In 1831 he saw five that were shot at the one locality of Kilbarrey; "they were very numerous that year about Waterford, and have been much scarcer since." One was procured there in Nov. 1848.—CORK. Smith, in his History of

Cork, written about a century ago, remarks that "they [bitterns] breed in this county;" in which, however, they now seem to be very scarce. In the autumn of 1838 one was shot at Glengariff. In the winter of 1840-41 two were killed; one at Youghal (where the species had before been met with by Mr. R. Ball), and another near the city of Cork. — KERRY. According to Mr. T. F. Neligan of Tralee, as reported in 1837, they were then exceedingly rare in the county, although common not many years before that period. In 1846 Mr. R. Chute considered them as "not now to be met with;" but late in the winter of 1848-49 one was shot there.

It will have been remarked that, in the winter of 1830-31, bitterns were more than commonly frequent in Dublin and the neighbouring counties,—in Waterford and perhaps in Down (those alluded to by the gamekeeper at Tollymore park, but without certainty as to year); thus implying an unusual migration to the island. In Great Britain we find the same to have occurred. Mr. Selby informs us that, in the winter of 1830-31,—
 "More than the usual number of bitterns has been killed in various parts of the kingdom; and I am credibly informed that no less than ten were exposed for sale in one morning at Bath." Mr. Heysham, writing from Carlisle, states that "During the months of December, January, and February last [winter of 1830-31] no less than eight specimens of the bittern were killed in this part of the county. * * * This is the more remarkable, as only a single specimen has been met with in the same district for the last ten or twelve years. It would appear, from the public journals, that about the same period of the year others were killed in Durham, Yorkshire, Devonshire, &c."* With reference to the numbers obtained in England, Sir Wm. Jardine observed:—"In the south of Scotland a similar comparative abundance occurred; several were brought to me in Dumfriesshire; and on a visit to Edinburgh it was found that the bird-preservers there had obtained also a more than usual number of specimens."

In the winter of 1844-45 again, they were considered to be

* Philosophical Magazine, 1832, p. 85.

rather plentiful in the Dublin market, which is supplied from several counties; and one was obtained in the county of Down. In that of 1848-49, they were killed in different parts of Ireland; five (as already noticed) being sent, during one week in January, to Dublin to be preserved; one was shot, in November, near Waterford; and another, late in the winter, in the county of Kerry.*

Winter being the season at which bitterns chiefly visit Ireland, their migration from more northern latitudes is thereby indicated. They annually breed in Scandinavia. I have not seen sufficient data to enable a satisfactory conclusion to be arrived at respecting the frequency of the visits of this species to England or Scotland; and hence cannot with confidence draw the usual comparison respecting the numbers found in the three countries. The bird is, however, probably as often met with in Ireland as in England; and more frequently in the former country than in Scotland.†

Mr. R. Ball remarks that—"Bitterns in confinement exhibit an extraordinary power of remaining fixed in any position in which they happen to be, when a spectator fixes his eyes upon them. In the instance of one kept in a garden at Youghal, the owner came suddenly on the bird, which was at the moment in an attitude of some difficulty; it seemed as if seized with catalepsy. The gentleman sat down near, and watched it for two hours, during which time the bird did not make the slightest movement, and finally exhausted his patience." The Great Plover (as will be seen by a note under that species) has a similar habit; and Audubon, in his description of the American bittern, remarks—"In Lower Louisiana it is called the 'Garde Soleil,' because they say it will stand on one foot for hours, with

* Three bitterns, all fine specimens, were stated, in the communication from Mr. J. Wright, Lymington, Hants, to the *Zoologist*, to have been shot within a few miles of that place in the three weeks preceding Jan. 11, 1849. On the 8th of this month one was shot in the county of Norfolk. (*Zoologist*, May 1849, p. 2421.)

† Mr. St. John remarks, in reference to the year 1848:—"The bittern is rare [in Sutherland]; but I have heard its cry near Shinness on loch Shin." (*Tour in Sutherland*, vol. i. p. 138.)

its eyes, or one of them at least, fixed on the orb of day; and frequently spread out its wings in the manner of cormorants and vultures to enjoy the heat, or perhaps the gentle breeze." (Orn. Biog. vol. iv. p. 296.) He again observes—"That they are extremely timid I well know; for, on several occasions, when I have suddenly come upon them, they have stood still from mere terror, until I have knocked them down with an oar or a stick," (p. 297.)

We find the bittern associated in the sacred volume with the desolation both of Babylon and Nineveh.* In reference to the former great city is the denunciation,—“I will also make it a possession for the bittern, and pools of water.” (Isaiah xiv. 23.) See also Isaiah xxxiv. 11.

As the species disappears before the improvement of the country by man, we can very rarely now, even in Ireland, hear

“At evening, o’er the swampy plain,
The bittern’s boom *come far*.”—*Southey*.

Yet it was one of the very few birds which Goldsmith, in his delightful “Animated Nature,” descanted on from personal observation in his native country. He remarks that it is not from its voracious appetite, “but its hollow boom, that the bittern is held in such detestation by the vulgar. I remember, in the place where I was a boy, with what terror the bird’s note affected the whole village; they considered it as the presage of some sad event; and generally found, or made one to succeed it. I do not speak ludicrously; but if any person in the neighbourhood died, they supposed it could not be otherwise, for the night-raven had foretold it; but if nobody happened to die, the death of a cow or a sheep gave completion to the prophecy.”†

The following commencement of the same author’s description

* Zephaniah ii. 14.

† The uneducated in various countries have had superstitions, or at least prognostications, in connexion with the note of the bittern; but I shall mention only one, not selected on account of its elegance, but from its having, so far as I am aware, appeared only in the page of a journal. As stated (by Mr. J. Hawley) in the *Zoologist* for Feb. 1849:—“I have heard some old people recite a doggerel rhyme

of the bittern may also be from personal observation :—"Those who have walked in an evening by the sedgy sides of unfrequented rivers must remember a variety of notes from different water-fowl ; the loud scream of the wild-goose, the croaking of the mallard,* the whining of the lapwing, and the tremulous neighing of the jack-snipe. But of all those sounds there is none so dismally hollow as the booming of the bittern. It is impossible for words to give those who have not heard the evening-call, an adequate idea of its solemnity. It is like the interrupted bellowing of a bull, but hollower and louder ; and is heard at a mile's distance, as if issuing from some formidable being that resided at the bottom of the waters."†

Of the five birds here named, the wild-goose and the bittern would not now be heard by Goldsmith in Ireland, where he had the opportunity of listening to them in his youth.‡ The former, which then bred, wholly ceased to do so long before the bittern's numbers were much lessened. The other three species still increase in the four quarters of the island, with the difference, however, of *common* being substituted for *jack-snipe* in the passage extracted. From "the tremulous neighing" which is mentioned, it is evident that the writer alludes to the *male* of the

referring to the bittern, which, though never found here, used—in their youthful days—to be not uncommon in the vicinity of Doncaster :—

" 'There 'll either be rain or else summat waur,

When "butter-bumps" sing upo' potteric car.' "—p. 2355.

* The expression—and by Goldsmith too !—"croaking" of the mallard, reminds me that the loud croaking of the frogs in the marshes near Navarino, and in other parts of Greece, in the spring of 1841, was commonly spoken of on board H.M.S. *Beacon* as the calling of "Irish ducks." I am not aware how the jesting term originated.

† The comparison of this bird's booming to the bellowing of a bull is not altogether fanciful. A friend who resided at Youghal in his youth, when about 13 or 14 years of age, set out one evening with several other boys to take a particular walk ; from which, however, they hastily fled homewards on hearing, as they thought, the roaring of a bull in the direction they were going. The next morning they learned from the gamekeeper, to whom the difference between booming and bellowing was known, and who had heard the bird, that the cause of their alarm had only been a bittern. The name *Botaurus* (applied generally to bitterns) must, we presume, have been given on account of the resemblance of the bird's cry to the roaring of a bull.

‡ In very retired haunts the bittern may still occasionally boom and breed in this island.

common species under the name of *jack-snipe*. It is not an unfrequent error, even at the present day, to imagine that jack-snipe means male snipe; in the same way that jack denotes the male sex of the ass, and other animals.

To quote the words of Goldsmith, "These bellowing explosions are chiefly heard from the beginning of spring to the end of autumn; and, however awful they may seem to us, are the calls to courtship or of connubial felicity." This writer judiciously combats the various ideas respecting the manner in which the sound is produced, and states that, unaided by any extraneous means, the bird's "windpipe is fitted to produce the sound for which it is remarkable."

Although we associate the bittern with the rank and humid marsh, or with "desolation," yet is there a finely poetical association with its name,—*Ardea stellaris*, or heron of the stars. This doubtless originated from its singular spiral flight, by means of which it ascends into the realms of space, far beyond the reach of human vision.

THE AMERICAN BITTERN,

Botaurus lentiginosus, Mont. (sp.)

Ardea lentiginosa „

—— *mokoko*, Wagler.

Has once been obtained.

THE specimen was thus noticed by me in the 17th volume of the Annals of Natural History, published in 1846. "I have the pleasure of placing on record the occurrence of an American bittern in Ireland, the first known to have visited this island. The fresh skin, being sent to Belfast to be preserved and mounted, came under my inspection on the 14th of November 1845; and having learned that it was sent from Armagh by the distinguished astronomer Dr. T. R. Robinson—whose acutely observant eye had not failed to mark the differences between it and the *Botaurus stellaris*—I wrote to him for all particulars respecting the bird, and

received the following information :—‘It was shot by my second son Wm. R. Robinson, about noon, on the 12th of November last, in a bog—part of a flat, partially drained tract called Llayde Bottoms—surrounded by hills, and a mile from Armagh. It was put up in sedge, seemed lazy, and flew heavily, not showing the usual wariness of the bittern, but letting him come rather close before it rose. Its stomach was empty ; but it was very fat and very good eating, for we roasted it ! The sex was, unfortunately, not noted. The glottis was peculiar, so that I suppose it must have had the powerful voice of the common species.’ Dr. Robinson, on being informed that it was the American bittern, most liberally presented the bird to the Belfast Museum. As bearing on the points touched upon in this letter, it may be observed that Audubon ‘never saw one of them fly farther than thirty or forty yards at a time ; and on such occasions their movements were so sluggish as to give opportunities of easily shooting them ; for (as he remarks) they generally rise within a few yards of you, and fly off very slowly in a direct course.’ (Orn. Biog. vol. iv. p. 297.) Wilson states that it ‘is considered by many to be excellent eating ;’—and that the American bird ‘has nothing of that loud booming sound for which the European bittern is so remarkable.’* Audubon has not himself heard its notes, but gives the observations of two well-known naturalists upon them. Dr. Richardson states that ‘its loud booming, exactly resembling that of the common bittern of Europe, may be heard every summer evening, and frequently during the day.’†

“Judging from these works, this bird takes the place in North America of the common bittern in Europe ; but is much more frequent there than the latter is *now* in any part of the British Islands. Audubon informs us that in winter it is ‘common in the markets of New Orleans, and bought by the poorer classes to make gombo soup.’

“The Prince of Canino, in his ‘Comparative List of the Birds

* Jardine’s edit. Wils. Amer. Orn. vol. iii. p. 57.

† Fauna Bor. Amer. p. 374.

of Europe and North America,' makes Montagu's *Ardea lentiginosa*, distinct from the American bird (*A. minor*, Wilson), with which, however, as described by Dr. Richardson, the one killed in Ireland is perfectly identical in species. It agrees so well with the 'description of a male killed on the Saskatchewan plains, 8th July 1827,'* that all the details of *colour* and markings equally apply to this example, except in the few following very trivial points:—

"The feathers on the vent and under tail-coverts being very sparingly dotted with brown towards the shafts instead of being 'unspotted;' the long feathers on the front and sides of the neck and breast having the central stripe of mottled clove-brown bordered with a blackish line which imparts to them a beautiful finish; outside of it is a line of deep yellow shading off gradually to a lighter tint at the margin. In every character of *form* the bird before me agrees with that description, except in having a slight development of web between the outer and inner toe, instead of being 'quite free' of such; and in the first quill being the longest instead of the 'second and third'—the first exceeds the second, as the second does the third, by not more than one line ($\frac{1}{12}$ th of an inch) in length. It may be added that the third exceeds the fourth by $1\frac{1}{2}$ line, and the fourth the fifth by 6 lines; and that these quills present a very interesting gradation in form from the first, which is pointed, to the fifth, that is quite square at the tip. Like the nine birds examined by Dr. Richardson, it possesses just ten tail-feathers. Wilson attributes twelve to *A. minor*. Two specimens could not be expected to resemble each other more nearly than that described by Dr. Richardson, and the one killed in Ireland; but the differences have been stated that the description of the former may suffice for the other, with the exceptions noted.

	in.	lin.
Length (total†) of Irish specimen	26	0
Length of wing	11	9
———— bill from first feathers on forehead to point	2	9
———— bill to rictus	3	$7\frac{1}{2}$
———— tarsus	3	8
———— naked part of tibia	1	2
———— middle toe	2	10
———— middle claw measured in a straight line	0	$7\frac{1}{2}$
———— hind toe	1	5
———— hind toe claw	1	$0\frac{1}{2}$

"Although the European and American bitterns have a general resemblance, they are found, when compared by the ornithologist,

* Consequently it differs entirely from the other male killed on the 27th June, and which doubtless must have been a bird of a different age.

† Not quite satisfactory, as the bird had been skinned.

to differ in all respects. The latter is much the smaller species ; but they both vary remarkably in size. The toes and claws are much smaller in the American bird. The most striking difference in its *colour* is the black stripe on each side of the neck, which in the specimen before me commences one and a half inch below the eye, and extends for three inches, until, in the shading off of the black, the two stripes may be said to meet at the back of the neck. The greatest breadth of this stripe is one inch. All the feathers of the front and sides of the neck and breast, having (as already described) a dark central stripe, give to that portion of the plumage a beautifully rich and *regularly streaked* appearance, which is rendered further conspicuous by the entire absence of dusky transverse markings, such as appear there in the common bittern. The whole dorsal plumage is different, and is much more handsome in the American bird than in the other, consisting of a beautiful mixture of brown of many shades and rich yellows ; and, when the light falls upon it, exhibiting reddish violet reflections, reminding us of the same parts in the jack-snipe (*Scolopax gallinula*) ; a species which it likewise resembles in possessing similar richly and beautifully coloured scapular feathers. The tail-feathers* of the American bird are of a uniform dusky brown—those of the European specimen compared with it have more or less of a narrow stripe of black towards the centre ; the rest being all freckled or mottled with black on a rich buff ground :—the quills of the American species are likewise of a uniform colour, while those of the European are barred alternately with black and buff, except at the tips, which are wholly black. Other differences might be pointed out, but those mentioned are the most striking. Temminck describes ‘zigzag’ markings on the upper parts of the plumage, and on the coverts of the wings ;† but there are not, in the American bittern before me, any markings to which I would apply that term, as there are on the neck and wing-coverts of the European bird.

“Yarrell’s figure gives a very good general idea of the American bittern ; but in two impressions (1st and 2nd editions) examined

* The tail-coverts are mottled.

† Man. d’Orn. de l’Eur. vol. iv. p. 382.

the back and wings look rather too dark, and I could hypercritically have wished the quills and tail shown of a uniform colour, as in this respect they so obviously differ from the same parts in the common species, in which they are banded. In figures of so small a size, however, characters like these can be but partially attended to.

“The first *Ardea lentiginosa* which occurred in Europe was (as is well known to ornithologists) described by Montagu under this name; it was killed in Dorsetshire in the autumn of 1804. A second was made known by Dr. E. Moore, as shot near Plymouth on the 22nd of Dec. 1829. Notice of a third, obtained near Christ-church in 1836, was communicated to Mr. Yarrell, who has likewise been told of a bird, believed to be of this species, having been procured in the Isle of Man; but the season or year is not mentioned. About the middle of October, 1844, the only one obtained in Scotland was killed on the property of Sir Wm. Jardine, Bart., in Dumfries-shire, and at a very appropriate time, when Mr. Gould, the well-known ornithologist, was on a visit at Jardine Hall—where, too, I lately had the pleasure of seeing the specimen. These are all the examples known to have occurred in Great Britain.

[In the same month (Feb. 1846) in which the preceding appeared in the *Annals*, the *Zoologist* contained a notice of one of these bitterns having been killed about the 8th of Dec. 1845, in the vicinity of Fleetwood, Lancashire.*]

“There is no record of the species having been procured on the continent of Europe, in Temminck’s ‘Manuel,’ &c. (vol. iv. 1840); Keyserling and Blasius’ ‘Wirbelthiere Europas’ (1840); or Schlegel’s ‘Revue Critique des Oiseaux d’Europe’ (1844),—a circumstance which, like the fact of other American species having been obtained in the British Islands, and not farther to the eastward, strengthens the circumstantial evidence in favour of such birds having really crossed the Atlantic. Three out of the four birds, the date of whose occurrence in the British Islands is known

* Contributed by Mr. James Cooper of Preston, who gives a description of the specimen, (p. 1248.)

to us, were met with about the migratory period, when the species leaves the more northern for the southern parts of North America. The fourth, which was obtained in December, may have arrived at that period, and have remained in the country unobserved until it was killed."

THE NIGHT HERON,

Nycticorax Gardenii, Gmel. (sp.)

———— *Europæus*, Steph.

Ardea nycticorax, Linn.

Is of very rare occurrence.

ONE which I saw in the shop of Mr. Glennon, bird-preserver, Dublin, in March 1834, and noticed in the Proceedings of the Zoological Society for that year (p. 30), was stated by him to have been sent in fresh condition from Letterkenny, in the county of Donegal. It was at the same time mentioned that two or three other examples, killed in Ireland, had been sent to him. Subsequently he informed me of the occurrence of another individual.* Between the year last-named and 1838 (Ann. Nat. Hist. vol. i. 157), Mr. John Nicholson of Tollbridge (county of Armagh) kindly presented a specimen shot in that neighbourhood, to the Belfast Museum, and favoured me with the following particulars respecting it:—"I saw this heron first, as it flew off from the branch of a Scotch fir tree, on which it had been resting for some time, near the side of a river. It flew about four hundred yards, and alighted on the bank of a large drain which fenced a plantation of osiers. I brought out a telescope, and watched it nearly half an hour to try to discover its habits. I noticed that, while at rest, walking about, or on wing, it invariably kept its head so low upon its body as to completely conceal its great length of neck; indeed it appeared to have no neck at all. Whilst searching for food, it stretched out its neck at full length. I shot at and missed it. Next day a young man

* One of these, as Mr. T. W. Warren afterwards learned, was shot near Westport (Mayo) by Mr. Gildea; another, said to have been killed in Queen's-county, was purchased by Mr. R. Ball, and is now in the University Museum, Dublin.

wounded and brought it to me, its wing and thigh-bone having been broken with the shot. When I took it in my hands, it raised up its head in a threatening attitude, erecting its crest, opening its bill and throat extremely wide, and at the same time uttering a loud croak." The bird is in the plumage of the first year, or that of the Gardenian heron (*Ardea Gardenii*), as represented by Mr. Selby.

It is stated, in the 'Fauna of Cork,' published in 1845, that "a fine male, with very long white crest, was shot at Castlefreke, a few years since, by the Rev. Joseph Stopford," (p. 12.) As noticed by Mr. Robert J. Montgomery, before the Dublin Nat. Hist. Society:—"A night heron was killed on the 1st of May 1848, at Beaulieu, in the county Louth, the seat of the Rev. A. J. Montgomery, by the Rev. Edward Groome, the rector of the parish. It was observed for several days frequenting the reedy margin of a piece of water in the demesne at Beaulieu, and was at first mistaken for a bittern by my cousin, who, knowing I was anxious for a specimen of the latter bird, in vain endeavoured to get a shot at it. When started from the reeds it took refuge in a tree. Mr. Groome shot twice at it before he succeeded in knocking it down, and even then, though severely wounded, it crawled through the weeds, and was with some difficulty captured. I received it the same day. On dissection it proved to be a male. While fresh, the irides were beautiful, of a colour between orange and vermilion—the legs and feet pale lemon yellow, of a particular delicate hue. Mr. Yarrell says they are green; but in this case they were of the colour mentioned. It measured, from the tip of the beak to the end of the tail twenty-three and a half inches; from the carpal joint to the end of the wing, twelve inches. The secondaries were spotted as in the Gardenian heron. It wanted the white crest, but was in other respects nearly in adult plumage."*

The night heron is a rare visitant from the south to England, and has twice been known to migrate to Scotland—in one of which instances a pair were killed.†

* This bird was briefly noticed in the *Zoologist* for June 1848, (p. 2147.)

† Jardine, *British Birds*, vol. iii. 152.

THE WHITE STORK,

Common Stork.

Ciconia alba, Brisson.*Ardea ciconia*, Linn.

Has been once procured.

MR. YARRELL having remarked, in his History of British Birds (1843), that the stork "is said to have been killed in Ireland," I applied to him for further information, and his notes were kindly referred to, but no authority for the statement could then be found. The only authentic record of which I am aware is the following subsequent one by Dr. Harvey of Cork, dated June 17, 1846 :—"A fine specimen of the white stork (*Ciconia alba*, Ray) was shot about three weeks since in the neighbourhood of Fermoy, in the county of Cork. I am informed that three were seen ; but this individual only was procured. It is now in the possession of the Rev. Mr. Bradshaw of this city." *

The specimen was afterwards added to Dr. Harvey's collection. One of these birds was likewise seen in the spring of 1846 near Driffeld, Yorkshire.† The stork is known only as a very rare visitant to England, and chiefly about the period of its migratory movement northward in spring Scandinavia is frequented by it as a breeding haunt. One is recorded to have been obtained on the mainland of Scotland, and two in Shetland.‡ Ireland lies too far west to be visited by this species, except on an extraordinary occasion.

A person going direct, as I have done, from England to Holland, and seeing numbers of storks before landing in the latter country, is much struck with the fact of their absence from the opposite

* Ann. Nat. Hist. July 1846, (p. 70, vol. xviii.); and *Zoologist* for same month, (p. 1395.)

† Rev. F. O. Morris in *Zoologist*, (vol. iv. p. 1501.)

‡ Thos. M. Grant, Esq. in Yarrell's British Birds.

coast. "It is," as Mr. Selby has observed, "a remarkable instance of the laws which direct the migrations of birds, and confine them within certain limits." In that country, where storks are such general favourites, and meet with the utmost protection, our soldiers—as I have heard from an artillery-man who was with the British army in reducing the frontier towns after the battle of Waterloo—got into great disgrace with the people by wantonly shooting their favourite birds. These may indeed be occasionally seen walking the streets with as much confidence as any burgo-master.

As the eagle is mentally associated with the most sublime scenes in nature, so, to the traveller at least, is the stork with the ruins of man's noblest works. Amid the desolation of his fallen cities throughout the fairer parts of Europe and the classic portion of Asia, we are sure to meet with them surmounting his temples, his theatres, or baths. But of all the appropriate localities in which the stork has met my eye, none—considering the filial reputation of the bird—struck me to be so peculiarly happy as the column dedicated to Julia Alpinula at Avenches; its summit being chosen by a pair for their nest in the summer of 1826. The allusion of Byron to this column, in the 3rd Canto of *Childe Harold*, will be remembered—

“ By a lone wall a lonelier column rears
 A grey and grief-worn aspect of old days ;
 'Tis the last remnant of the wreck of years ;
 And looks as with the wild-bewilder'd gaze
 Of one to stone converted by amaze,
 Yet still with consciousness ; and there it stands
 Making a marvel that it not decays,
 When the coeval pride of human hands
 Levell'd Aventicum,* hath strewed her subject lands.

And there—oh ! sweet and sacred be the name !—
 Julia—the daughter, the devoted—gave
 Her youth to Heaven ; her heart, beneath a claim
 Nearest to Heaven's, broke o'er a father's grave.

* Aventicum, near Morat, was the Roman capital of Helvetia, where Avenches now stands.

Justice is sworn 'gainst tears ; and hers would crave
 The life she lived in ; but the judge was just,
 And then she died on him she could not save.
 Their tomb was simple, and without a bust,
 And held within their urn one mind, one heart, one dust.”*

Had the noble poet seen the column as it was in the year 1826, his ‘Pilgrimage’ might have been enriched with an additional stanza.

When visiting Smyrna in the summer of 1841, I learned that the storks, when building on the houses there, decidedly prefer those of the Turks to the mansions of the Greeks :—a remark which seemed fanciful, until it was explained that the former, in their kind and amiable feeling towards the lower animals, protect the birds, while the Greeks do not scruple to rob their nests and otherwise annoy them.

Since the preceding was written, the subject has been alluded to in the very interesting work on Lycia, by my friends, Lieut. Spratt and Professor Edward Forbes, published in 1846. It is there remarked—“The superior mildness of the climate and advance of the season in this locality [Almalee], though elevated 4,000 feet above the sea, was indicated by the storks, several of which birds had built their enormous nests on the house-tops in the village. In one, the young were already fledged [May 14]. As yet, in the more northern plains, but few storks had ventured, and none had begun to breed. Storks and swallows are almost domesticated in Turkey, through the scrupulous care shown by the inhabitants to preserve their nests. They are allowed to build where they like, unmolested. * * * The stork seldom builds his nest far from a village, and usually selects the roof of a house

* “Julia Alpinula, a young Aventian priestess, died soon after a vain attempt to save her father, condemned to death as a traitor by Aulus Cæcina. Her epitaph was discovered many years ago ; it is thus :—“Julia Alpinula : Hic jaceo : Infeliciis patris infelix proles. Dæe Aventiæ Sacerdos. Exorare patris necem non potui : Male mori in fati illi erat. Vixi annos xxiii.” I know of no human composition so affecting as this, nor a history of deeper interest. These are the names and actions which ought not to perish, and to which we turn, with a true and healthy tenderness, from the wretched and glittering detail of a confused mass of conquests and battles, with which the mind is roused for a time to a false and feverish sympathy, from whence it recurs at length, with all the nausea consequent on such intoxication.”

for its site. Such is the confidence these birds have learned to place in the Mahomedan part of the population, that it is not uncommon to see every house in a Turkish village crowned with their nests. They shun Christian habitations, for the Greeks neither encourage nor permit them to build so near." (Vol. i. p. 282.)

THE BLACK STORK (*Ciconia nigra*, Will.) is unknown as a visitant to the island. Dr. Scouler included it in a 'Notice of Animals which have disappeared from Ireland,'* on the authority of the following words from Giraldus:—"Ciconiæ vero per totam insulam rarissimi sunt illæ nigræ." (Top. Hib. 707.)

Four only of these birds have been recorded as obtained in England† (none in Scotland); the first in May 1814. Although they migrate so far northward in summer as Sweden, their line of flight is still more easterly than that of the white stork; even Holland being very rarely visited by them.

THE SPOONBILL.

White Spoonbill.

Platalea leucorodia, Linn.

Is a rare visitant.

THE earliest note of the occurrence of this bird in Ireland, known to me, is that of Templeton, who mentions one as having been shot at Ballydrain Lake (county of Antrim), near Belfast: the date is not mentioned in his published paper; but, according to an entry made in his journal on the 17th January, 1808, it was killed a few years before that period. Mr. R. Ball—as noticed in the Proceedings of the Zoological Society for 1834 (p. 30)—informed me, that in the autumn of 1829 three spoonbills were seen in company near Youghal (Cork), and one of them shot: it was preserved by Dr. Green of that town, and was then in his pos-

* Journ. Geolog. Soc. of Dublin, vol. i. p. 227. † Yarr. B. B. 2nd ed. 1845.

session. Since that time, my friend learned that one or two more of these birds had been killed in the same neighbourhood, at Dro-mana (Waterford), and were displayed in the gamekeepers' out-of-door museum along with common "vermin." In February 1832, three spoonbills were shot from a flock of five near Dingle, county of Kerry, and one of them sent to my informant, the late Mr. T. F. Neligan, of Tralee. Major Walker, of Belmont, Wexford, writing to me in November 1836, remarked, that Mr. Deve-reux, jun., of Carrickmannon, in that county, had told him of seven spoonbills having frequented a pond at his place in the preceding winter; but they were so wary as never to admit of his approach within gun-shot. A spoonbill is said to have been killed in the winter of 1837-38 in the county of Donegal; but not preserved.* As my excellent correspondent, Mr. Joseph Poole, was returning from shooting on the south coast [Wexford?] in July 1840, with his gun unloaded, a spoonbill passed within about ten yards of him. He afterwards saw the bird several times in a marsh in the same neighbourhood; but it would not admit of a near approach. On the 26th November, 1841, a female was shot on Rogerstown strand, near Swords, county of Dublin: another spoonbill was in company with it. Mr. T. W. Warren, who informed me of its occurrence, kindly took the following notes for my use:—

It was $3\frac{3}{4}$ lbs. in weight, and in every respect very large. The spoon part of the bill was 2 inches 2 lines in breadth; the extent of wings 4 feet. The plumage indicated a young bird of the year, as the outer webs of the quills were black; their tips and those of the secondaries being also of that colour, which was displayed from $\frac{1}{4}$ of an inch to 3 inches in depth. The tail was slate-grey with the shafts of the feathers white; its under side being of a deeper tint than the upper. Mane-like feathers extended from the back of the head down the neck for 4 inches. Legs blackish-brown, lighter on the inside of the thighs, and beautifully tessellated with hexagonal scales edged with dingy white. Its stomach was filled with shrimps.

On the 30th of November 1843, one was killed close to the town of Youghal.†

About the middle of October 1844, a spoonbill was shot in the

* Mr. T. W. Warren.

† Dr. J. R. Harvey.

county of Wicklow, at a little lake or pond a quarter of a mile from the sea-shore. A common heron was beside it; but as the fowler approached in a boat, this bird made its escape, and the spoonbill remaining behind was killed. Another was shot on the 12th of November of the same year, at Killag, on the lake of Ballyteigue, county Wexford. On August 25, 1845, I was informed of a spoonbill having been "shot recently at Youghal;" but no further particulars were supplied. On the 8th of October the same year one was killed very near that town, and, like the specimen obtained in November 1843, was received in a fresh state, by Mr. S. Moss, of Youghal, who preserved them both: he considered them to be "immature from having no yellow on the breast." Two spoonbills were seen near the village of Castlegregory (Kerry), in November 1846, and one of them wounded. It came into the possession of Mr. R. Chute, who informed me of the circumstance, and added that it is a young bird.

The preceding notes inform us of the occurrence of the spoonbill in Ireland in eleven years within the present century; and with reference to the birds killed at Dromana no period is named. In the successive years of 1840 and 1841, and of 1843, 1844, and 1845, the species appeared in this island. It is singular, that winter should be the chief season of its visits.

Major Thomas Walker (of Belmont, Wexford), who has met with flocks of these birds when on shooting expeditions in Hungary, remarked, in a letter to me, written in June 1846, that—"The motions of the spoonbill are singular when a number are standing in a line on the edge of a stream. They keep streaking the bill sideways through the water, and the movement is simultaneous; all the bills being directed up the stream at once, and all down it at the same time."

The spoonbill has been noticed as breeding annually in England at an early period; but for the last century, at least, it has been only an occasional visitant to that country. The facts brought forward here indicate its occurrence, perhaps as often as in England, and much more frequently than in Scotland. Sir Wil-

liam Jardine, writing in 1842, merely referred to what had been stated in Dr. Fleming's 'History of British Animals,' published in 1828, where Sibbald is mentioned as having noticed the species to be an accidental visitant to Scotland, and as having been received from Orkney. It is said also to have "been shot in Zetland" (p. 94). Like all the other rare birds of this family (*Ardeidæ*), noticed in the preceding pages, the one now under consideration retires far southward to winter.

When visiting the Zoological Garden, Regent's Park, London, in May 1834, I was gratified by observing the affection subsisting between a spoonbill and a black stork (*Ciconia nigra*). The bill of the latter was much broken; but its companion afforded the use of his, and was busily engaged dressing the breast plumage, and perhaps endeavouring to destroy the parasitical insects of the stork. After he had performed this kind office for some time and ceased, the stork put down his bill, and worked, as well as he could with a broken instrument, among his feathers: this was a signal for the spoonbill to renew his efforts, and he recommenced the friendly task. Each bird having one leg drawn up all the time, caused the whole scene to be rather comical. The operation over, the two birds continued close together, the spoonbill figuratively under the shadow of the stork's wing. The latter bird is quite a distinguished individual, having, in the words of Mr. Yarrell, "stood for his portrait to illustrate the ornithological works of Mr. Bennett, Mr. Selby, Mr. Gould, Mr. Meyer, my own, and probably those of several others."*

* Brit. Birds, vol. ii. p. 498.

THE GLOSSY IBIS.

Ibis falcinellus, Linn. (sp.)*Tantalus* „ „

Is an occasional visitant ; chiefly late in autumn or early in winter, when (we may presume) on its migration southwards.

MUCH the greater number of those obtained are young birds of the year. The earliest record I have seen of the occurrence of the Ibis, is that of Templeton, who mentions one as having been “shot in the bog-meadows near Belfast, on Sept. 30th, 1819.” Two of these birds, killed in the county of Cork many years ago, are stated (by Mr. W. S. Wall, bird-preserver) to have been sent to the Museum of the Royal Dublin Society. In the year 1833, I was informed (by Mr. Glennon, bird-preserver) that seven had been shot in the county of Longford by Colonels Patrickson and the late Rev. Mr. Brougham, in three different years, and in each instance at the same season :—autumn, most probably. One of the birds, which was but slightly wounded, became very familiar, and was a great favourite with its owner, a gentleman in Dublin. Another of them—killed near the town of Longford—has come under my examination. It is in beautiful adult plumage, and enriches the collection of Mr. Warren, of Dublin, who possesses a second fine specimen of the ibis, which was killed near Dungarvan, county of Waterford. At Dromana, in that county, one was shot about the middle of November 1834 : and was preserved for Sir Wm. Homan.* About the end of October and in November 1840, five ibises were sent to Mr. Glennon to be preserved, two of which were killed at Enniscorthy (Wexford), and one at Balrothery (Dublin).† I subsequently saw these last three specimens in the Museum of the Natural History

* Mr. R. Ball.

† Mr. T. W. Warren.

Society of Dublin. They were shot in the month of October. In November the fourth was procured in King's-county. Of the fifth, particulars were not communicated. Two others were killed in the county of Wexford that season, and my informant states, that in the summer of 1818, which was very warm, several were obtained there.*

The ibis is known only as an occasional visitant to England, though a much more frequent one than to Ireland; a single individual is recorded to have occurred in Scotland (in Fife-shire).† The regular line of migration of this bird towards the north, in spring, is far to the eastward of the British Islands. The eastern and southern parts of England are those most usually visited, as the corresponding provinces are in Ireland. As yet, we have no record of the occurrence of the species in Connaught, and but one instance is known of its appearance in Ulster.

On the 24th of April, 1841, when H.M.S. *Beacon* was about ninety miles east of Sicily—Syracuse the nearest land—I observed a flock, consisting of twelve of these birds, appear at a distance, coming from the south-west. They flew close past the vessel, and continued in the same course (towards the north-east) until lost to view.

Although the bird under consideration is not the sacred ibis (*Ibis religiosa*, Cuv.), it was honoured, in Egypt, by having its body embahned. The sacred ibis, having been killed of late years in Greece, has now a place in the Fauna of Europe.‡

* Mr. Wheelock, bird-preserver, Wexford.

† Mr. Hepburn in Yarr. Brit. Birds(1845).

‡ Temminck, Part iv. p. 392 (1840).

THE CURLEW.

Whaap.

Numenius arquata, Linn. (sp.)*Scolopax* ,, ,,

Is common around the coast and in marshy inland districts throughout the year ;*

BUT much less so in the breeding season than at other times.

Habits in Belfast Bay, &c.

Of all our shore birds this is the most wary and quick-sighted, and of its caution we have interesting evidence almost daily, in Belfast Bay. In an undulating sweep of the coast, little more than two miles from the town on the county Down shore, named Harrison's Bay, there is a sand-bank, far out of the range of gun-shot from any of the fences that half-encircle it, and wholly inaccessible to the fowler from any direction without his approach being observed. On this bank, the curlews, before being driven so far off their feeding-grounds by the flowing tide as to place them within gun-shot of any part of the shore, assemble day and night, and calling most vociferously to all out-liers, as if in dread that a single straggler from their forces, until this time widely scattered over the banks, should be left behind. The gathering cry having done its duty, they await, in "clamorous confusion," the close approach of the tide, which having reached them, the greater number, in a large body, followed by nearly all the others, in smaller flocks, rise in rapid flight to a considerable elevation, and, assuming in due time the form of a wedge in front but with the sides of unequal length, wing their way to some

* In the works of Pennant, Bewick, Montagu, and Selby, the curlew is mentioned only as frequenting the sea-coast in winter ; but in Ireland the young resort to it as soon as they can use their wings.

insular rocks about the southern entrance of the bay ;*—keeping up all the while a softly guttural concert, seemingly of congratulation or affection, quite the reverse of their ordinary harsh cry.† Here, the station being unapproachable without their cognizance, they remain in perfect security until the ebbing tide has again exposed the sandbank that they left, and just then, with unerring certainty, they return, well knowing that their feeding-ground, at a sufficient distance from the shore to keep them safe from fowlers, is again uncovered. They leave this asylum of safety—not as they started for it, in a large body, but in small detached flocks, flying low and silently, or rarely uttering their low guttural note. They appear consecutively over the western point of Holywood rabbit-warren, and all hold the same course onwards until they are again spread over the zostera-covered banks. The period of their absence depends on whether the tides be “ high ” or “ low : ” two hours after their departure, I have observed them to return. In the season when whimbrels are here, these birds accompany the curlews in their tidal flights.

The above is their ordinary proceeding. The following note

* The first time I had evidence—circumstantial, at least—of their place of resort, appears from the following note :—

Bangor, Sept. 10, 1835. When near Groomsport to-day, during high water, I saw a great number of curlews, stationed on small insulated rocks adjacent to the shore. The sight of these birds solved what had hitherto been a mystery to me, namely, whither the curlews fly when the tide covers the oozy banks of Belfast Bay. From the numbers which were here, this is doubtless their resort ; not one was feeding, but all were motionlessly awaiting the falling of the waters, with their heads turned in the same direction. I recollect, in the summer of 1833, seeing a small rock at the Skerries, near Portrush, in like manner covered with curlews at high water : doubtless they were remaining there for a similar reason.

† It is requisite to state, that since the above was written, a line of railway has been carried across the little bay described. The proceedings of the curlews, however, are still the same. On the evenings of the 15th and 16th of August, 1849, I happened to be on the Kinnegar, near Holywood, at the time of their flying down the bay, and was much interested by remarking—though great changes have taken place in the locality—the entire procedure as it was a quarter of a century ago. The first flock, consisting of about a hundred birds, appeared in the form of a semi-circle, and was followed, after a short interval, by a similar number, broken into four or five flocks of different size ; these, again, were followed by a few which alighted within the inner bay of the Kinnegar. Both large and small flocks, as they advanced, approximated to the wedge-form in front, though the two sides of the flock were, as usual, of most unequal length.

details some little difference.—*Oct.* 6, 1837. When high water was just about reaching the curlew-bank at Harrison's Bay, six of these birds flew over me within shot, as I was riding down Bunker's-hill. When they were out of sight, a single bird, which had doubtless been feeding with them and was left behind, followed in their wake precisely, though they could not have been seen by it. A few minutes afterwards, the grand flock sallied from their bank, flying, as usual, down the bay. It was beautiful to observe them, at first in picturesque irregularity, then lengthening out to a single string or chain, and so continuing until they disappeared from view. A small party remained behind on the bank, and in silence, until, at the report of a swivel-gun fired at the distance of some miles, they commenced first *whaaping* gutturally, and then calling shrilly to each other. The smaller waders, dunlins, &c., though silent before, now sent forth their shrill calls, which were as likely to have been prompted by those of the guardian curlew as caused by their hearing the report.*

Sometimes, but very rarely, the tide is so low as not to reach the curlew-bank, on which occasions the birds remain congregated on it until the feeding-grounds they had left are once more exposed by the ebb, and then return to them; but from their being easily alarmed, though without sufficient cause, they are usually frightened away. I have noted on one occasion, that after waiting patiently here for nearly an hour after high water, the report of a swivel-gun at no great distance, though not within several "shots" of their bank, alarmed them, and though their hour had almost come for spreading themselves over the oozy banks, they rose, *en masse*, high into the air, and took their flight towards the entrance of the bay. Five herons rising from the banks at the same time, followed them in a flock.

I once observed with interest a departure from the usual pro-

* When observing large bodies of lapwings and other birds alight beside flocks of curlews, one can hardly but think that it is done to be under their guardianship, knowing, as different species must well do, their extreme vigilance. The smaller gulls act similarly, by gathering about the spot where their chief, *Larus marinus*, takes up his position.

cedure at high water. This was on a calm day, when a flock of about forty curlews and a few herons closely associated on a floating mass of *Zostera marina*—an oasis in the desert of waters to them;—the curlews remained there until the tide had ebbed, continuing all the while to utter their hoarse guttural note.

A few individuals, chiefly young birds, which did not attend the summons of their elders or wiser brethren, and take the flights described, remained behind about the grassy margin of the bay. Being a regular shore-shooter in my juvenile days, I managed, when the tide was full at a particular hour, so as to drive such birds within reach of the fences behind which I was concealed, to make them my victims. With perhaps a savage pleasure I delighted in such spoils above all others, not only because the curlew is the largest of our edible “waders,” but from a feeling of satisfaction that the fallen should never again, by their alarm-note, fright the smaller species from permitting my approach near enough to slay them. In this respect the curlew is the Marplot of the sportsman.* Professor Wilson has inimitably described the boyish feeling when in pursuit of the curlew:—“At first sight of his long bill aloft above the rushes, we could hear our heart beating quick time in the desert; at the turning of his neck, *the body being yet still*, our heart ceased to beat altogether—and we grew sick with hope when near enough to see *the wild beauty of his eye*.”† The words marked in italics show the acuteness of observation in the author, as admirably as the language does his power “to wreak his thoughts upon expression.” The ease with which the neck is turned whilst the body remains *motionless* is very interesting to witness. In the expression or “wild beauty of his eye,” not one of our birds can for a moment bear comparison with the curlew.

* The greatest numbers of curlews that I have heard of being obtained on the coast at one shot from a shoulder-gun were twenty and twenty-three: the former killed in Cork harbour; the latter (by night) at the block-house, Carlingford Lough. On the 27th Nov. 1845, eleven curlews, one oyster-catcher, six knots, twelve red-shanks, and about thirty dunlins were procured by one discharge of a swivel-gun in Belfast Bay.

† ‘Recreations of Christopher North,’ vol. i. p. 52, and vol. ii. p. 242.

In dark and stormy nights curlews are unwilling to undertake the flight described, and seek the sheltered creek within the Kinnegar of Holywood. When lying in wait for them here, at such times, I have remarked them come and alight with silence, their distrust being at the same time evinced by the slightest noise,—as the snapping of a gun,—driving them away.

With reference to the cautious fear manifested by the curlew, it may be added, that once, on a calm bright day, I observed four of these birds alight during high water at the edge of the tide, where they were out of range of shot from the shore; but, being alarmed, though without cause, they flew out and alighted in the water, where it was so deep that their legs were entirely concealed from view: had I not seen them on wing and alighting, they would have passed for *Natatores*. Of the caution (?) of the curlew we have an amusing instance in the bird kept by Colonel Montagu. After selecting the worms from the bread-and-milk, in which they were served up to induce the captive to partake of the latter food also, it carried all off to the pond, and washed them well, before venturing to swallow any.

Mr. Selby, in his ‘Illustrations of British Ornithology,’ and Sir Wm. Jardine, in a note to his edition of Wilson’s ‘American Ornithology,’ have each, from his own observation—and in terms manifesting an ardent love of nature—dwelt upon the instinct of the curlew; but in both works it is the flight from the sea to inland stations, not to marine rocky islets, that is mentioned. In neither work is there any difference alluded to, as in the preceding instances, on the different manner of the birds going to and returning from the sea. By the latter author it is observed, that they fly in a direct line to their feeding-grounds; but in Belfast Bay, though the distance would be much shorter over land, their going and returning flights are invariably above the sea. On the opposite side of the bay, however, where the highly improved farms of some of the gentry present enclosures so large that the centre of them is beyond the reach of gun-shot from any fence, the curlew resorts, preferring meadow or pasture land, and remaining, as on the marine islets, just so long as the tide may be in receding from their feeding-quarters in the estuary. In

their silent return over the lofty trees which border the bay, we witness their most interesting placid flight, when the wing is kept at full stretch, but motionless, except an occasional beat for the onward impetus. What a graceful skim through the air they take before alighting! presenting such a contrast to the wild upturning flight and harshly reverberating cry, which makes the welkin ring, as we come suddenly upon them in the far retired and crater-like hollows of the mountains.

Sept. 11, 1839.—I have often remarked, as I did to-day, different species of our *Grallatores*, — curlews, redshanks, knots, dunlins, &c. — when disturbed by being perseveringly fired at, take to the air, and call with all their might, as if to summon every individual of their species within hearing; then mounting high into the atmosphere, and continuing to call so long as within audible distance, they betook themselves in the direction of Strangford Lough. Thither do they also go when a very high spring tide covers the *whole* beach, so as to leave them no resting-place from their enemy—man. It is not because their feeding-ground is entirely covered that they thus depart; for the same species, with the exception of the curlews and whimbrels, are content to await, close at hand, the falling of ordinary tides. The dunlins, ring dotterels, and redshanks, taking up their quarters within Thomson's embankment; herons and curlews (in part) in the large fields of Fort-William, Parkmount, &c.; and all these (except the herons), with other species, may be seen on the slightly raised promontories or jutting-points of Holywood rabbit-warren. During high water is *their* time of rest, as I have often, on such occasions, been much pleased by witnessing their varied attitudes of repose. All, however, do not close their eyes; for, as in the case of bipeds of a different *order*,

“ Some must *watch* while others sleep;
Thus—runs the world away !”

Its Food.—The curlew is considered by shooters both a night

and day-feeder. On examination of the stomachs of six birds, killed in different months, two were found to contain the remains of worms, and one, of vegetable matter in addition to them; a third was filled with insect larvæ; a fourth contained the fragment of a cockle and some sand; a fifth was filled with the remains of crabs which could not have been less than an inch and a half across the carapace, or body; the sixth was half filled with pebbles, some of which were one-third of an inch in diameter. A fowler once remarked to me, that he had seen crabs of so large a size in the curlew that it was "a marvel" to him how the bird could swallow them. "The curlew (according to Mr. Poole) is sometimes very much infested with intestinal worms, which, in some cases, literally cover the folds of the viscera and the parietes of the abdomen." I have noticed that the bill of this species is a longer time attaining its full dimensions—about six inches—than the body is, its full size.

Variety in Colour.—A white curlew, shot by Mr. David Stewart, in the winter of 1848, on his farm at Tulnakill, near Ardmillan, on the shore of Strangford Lough, was (through the kind attention of Mr. Caughey of the latter place) forwarded to Belfast for my examination. It is an adult bird of full size; bill, nearly five inches long from rictus to point, &c. It would be called wholly white, as there is not a dark spot or marking in its entire plumage. The whitish colour which prevails throughout, however, is not pure. A very faint brownish-white hue appears in front and on one side of the neck and breast, as well as on the central portion of the dorsal plumage: the quills near the shafts are likewise of this colour. All the rest is white, of a very pale cream-coloured tinge. The bill is whitish horn-colour: one tarsus is of the ordinary hue, the other lighter; but both would doubtless have become whitish had the bird been permitted to live long enough. This curlew had been observed occasionally, during two years, in the district in which it was killed. It was then in company with several others of its species.

Breeding-places.—The curlew breeds only in the least frequented boggy tracts. In the county of Antrim, it is believed to do so in

the wild district of the Glens, within a few miles of Cushendall. When at Toome, in August 1846, a boatman who rowed us to Church Island, in Lough Beg, stated that he had been told of its having nests in the islands, &c., about there;—in all respects very favourable sites for them. The gamekeeper of Mr. Stewart, of the Horn (Donegal), has seen their eggs and young in the bogs of that remote district; and I had confirmation of their breeding in a tract about seven miles south-west of Dunfanaghy, by two young birds of the year being brought to me thence on the 26th June, 1832, on the morning of which day they were shot. These birds were about the size of whimbrels; they are stated also to breed in the district of Ennishowen, and in the wilder parts of the county Monaghan. I am not aware whether the chain of mountains in Sligo, called the Curlews, has reference to the bird or not. According to Mr. G. Jackson (gamekeeper), curlews bred very commonly in some localities every year that he lived in Connaught (from about 1829–1839). He used to find from ten to twenty nests each season, in the extensive flat bogs lying between the towns of Swineford and Ballaghaderren, in the county of Mayo; and Castlerea and Frenchpark, in the county of Roscommon. He never found the nest (so called), which is a mere hollow on some dry tussock, in any elevated place, and does not recollect ever seeing one contain more than four eggs. He more frequently found the young than the nest; and generally, when training young pointers, after the young grouse could fly well, in the latter part of July and beginning of August. June and July is the principal time of the birds' breeding there.

Major Higginson states that curlews continue, to the present time, to breed in considerable numbers in a large bog near his residence in King's-county. He is in the habit of exercising his horses in a field which adjoins the bog; and, when there in the breeding season, the curlews fly close to him, and are very clamorous, in the same manner as peewits.*

The curlew breeds in considerable numbers on the bog of Allen,

* Mr. J. R. Garrett, June 1848.

whence the eggs were, several years, brought to Mr. R. Davis, jun., of Clonmel; it lays there about the 20th of April. A nest containing young birds was observed on a mountain about twelve miles from Tralee, in or before 1837.* Mr. R. Chute (writing in March 1846) reported three nests to have been discovered one day in a small retired bog at Caragh Lake, in the same county; and that he had often seen the birds in summer, on the boggy mountains of Kerry, though he had never found their nests.

Although the curlew thus breeds in various parts of the country—and in many more places than those named it must do so—the native-bred birds, in my opinion, form a very small portion of the multitudes which frequent our shores. The only notes before me, which bear upon the species congregating for departure northward, relate to the unusual circumstance, that on the 9th of May, 1832, an immense flock was seen in a field adjoining the southern shore of Belfast Bay; and that, on the 19th of the same month, a flock of about a hundred was observed in a wheat-field on the opposite shore. At this period, our native birds are chiefly in their breeding haunts.

To some sporting friends, curlews have been known, for the last twenty years, to breed annually in numbers on the mountains above Ballantrae, in Ayrshire. On the 12th of August, 1839, I myself saw a number of young birds about their breeding haunts there; but did not hear, from either young or old, the alarm-cry or whaap, though both were calling a good deal in their other note—*courlieu*, which, on the wild moor, is sweetly pleasing to the ear. Curlews breed in quantity in the mountain tracts, ten to fifteen miles farther inland, though these cannot be called “retired.” Here their eggs are much sought after, and carried off; and the young frequently fall victims; their height rendering them such conspicuous objects, that they can with little difficulty be discovered. An ornithologist, under whose notice they came, at the end of April 1844, on the hills above Ballochmorrie, where they were breeding, remarked to me how very different were their

* Mr. T. F. Neligan.

call and their flight, from what they usually are. They rose, with quickly repeated beats of the wing, high into the air, and repeated their soft note, *courlieu, courlieu*. Two other calls may now occasionally be heard—the well-known *whaap*, and another which sounds like *wheeaou, whee-ou*. When in the island of Islay, in 1849, I could not learn that the curlew bred there; but it was said to do so annually in Jura. The habits, &c., of the species at this period will be found very fully and picturesquely described by Sir Wm. Jardine, in a note to his edition of Wilson's 'American Ornithology' (vol. iii. p. 44).

Mr. Hewitson observes:—"Whilst in Norway, we were much amused with what appeared to us to be quite a new and unnoticed habit amongst the *Grallatores*, or Wading-birds. * * * We found it to be a practice by no means uncommon with the red-shank and the greenshank, to settle upon trees; and what surprised us more than all, was to see the long-legged curlew alight, as it frequently did, on the top of the highest trees of the pine-forest, and to hear it, as it passed from tree to tree, utter its loud clear whistle."* Mr. Geo. Matthews informed me, on his return from Norway, that curlews were common during summer, and generally in pairs, about Trondjeim, where they were usually seen perched on the tops of the cabins of the peasantry.

Flights by Night.—By night, throughout the month of June, as well as in the day-time, the call of the curlew is heard over the town of Belfast; at which period, old birds, accompanied by their young, fly to the bay, and from it again, in a southerly direction, probably to their nesting-places. Towards the end of this month, some flocks have taken up their quarters in Belfast Bay after the breeding season; and in Strangford Lough I have remarked them at the same period. But in spring and autumn also, curlews may be heard calling at night when flying over the town. On the 10th and 11th of March, 1834, they were noted as heard loudly calling about twelve o'clock, as they had been several times at an earlier hour during the preceding two weeks,

* Eggs, Brit. Birds, p. 286.

although the nights were dark. They were likewise heard on the 22nd of the same month in 1843, and on the 13th in 1844: on the latter occasion, from midnight until four o'clock in the morning; on the next evening they commenced so early as soon after nine o'clock. In the following year, they first attracted attention in this manner, on the 28th of February. A similar habit prevails during the months of July and August. These flights are taken in dark as well as moonlight nights, and in every state of the tide. In the silence of a fine starry night, when nought else is heard, the cry of the curlew, consisting both of the simple and the long-drawn tremulous whistle, uttered from a great height in the air, has a very fine effect. The calling and answering of these birds by night, is often heard over the city of Dublin.*

Name, &c.—Whaap is, in Ireland, as elsewhere, the name bestowed on this bird by the peasantry,—and I have always considered, on account of its being the nearest approach in sound to the alarm-cry of the bird. Mr. Yarrell, however, observes, on this subject, “Throughout Scotland and its isles, the curlew is called a whaap, or whaup, which, in Jamieson’s Scottish Dictionary, is said to be a name for a goblin, supposed to go about under the eaves of houses after night-fall, having a long beak. Sir Walter Scott refers to this supposed connexion of a long beak with a suspicious character in his ‘Black Dwarf’ (chap. ii.), in a dialogue between Hobbie Elliott and Earns-cliff, in the evening on Mucklestane Moor: the former says, ‘What need I care for the Mucklestane Moor only mair than ye do yoursel, Earns-cliff? to be sure they say there’s a sort o’ worricows and lang-nebbit things about the land, but what need I care for them?’ and this enables us to understand the fag end of a highlander’s prayer, to be saved harmless ‘from witches, warlocks, and aw lang-nebbet things.’”† I should, however, imagine it quite as probable that the “lang-nebbit things” derived the honour of their euphonious patronymic, Whaap, from the curlew, as the bird does its more polite name, from another of its calls.

* Mr. R. Ball.

† Brit. Birds, vol. ii. p. 512.

The cry of the curlew is by far the loudest uttered by any of our grallatorial birds. It will perhaps be scarcely credited that it can be heard at the distance of nearly three English miles; yet, under peculiar circumstances, such is the case. I have heard it so on calm moonlight nights, when, at the extremity of the bay at Holywood warren, awaiting the flight of these birds from Harrison's Bay and Conswater, whence the flowing tide would drive them from particular banks respectively about two and three miles distant from my station. The call from the first-named locality sounded quite near, and from the latter distinct, though much more faintly; the state of the tide at the time evincing, with certainty, that all the banks, except the two alluded to, were covered too deeply with water for the birds to be on them. The shore-shooters are well aware of this circumstance.*

As remarked in St. John's 'Egypt':—"The Arabs are an inventive and poetical people. They know, after their fashion, how to explain everything. Even the cry of the curlew, which they call *Karrawan*, has, they say, a solemn meaning when translated into human language. Impressed with a due sense of the power and majesty of the Creator, this bird, in its solitary flight among the rocks, thus addresses the Deity:—*Lak*, lak, lak, la shariah Kalak, fi'l mulk; that is, 'To thee, to thee, to thee belongs the sovereignty of the world, without partner or companion!'" (vol. i. p. 344.)

* Respecting the distance from which we may hear birds, the Rev. L. Jenyns remarks:—"I have at such times [the air still and frosty] distinctly heard two cocks calling to one another from two different homesteads, situate a mile and a half or more apart." (Observations in Nat. Hist., p. 170.)

Mr. Blackwall, too, has observed that the hooting of the tawny owl may be heard to the distance of a mile, or even two miles, under very favourable circumstances. (Ann. Nat. Hist., vol. xv. p. 167.)

THE WHIMBREL.

May Curlew ; May Whaap ; May-bird, or May-fowl ;
 Jack Curlew ; Stone Curlew.

Numenius phæopus, Linn. (sp.)

Scolopax " "

Is common, especially when moving northward in its
 vernal migration.

THIS is the only one of the *Scolopacidae* that can be characterized, in general terms (exceptions there must surely be), as a bird of double passage only,—visiting us merely on migration to and from its breeding haunts.* Doubtless it may at least occasionally be met with, in winter, on some parts of the coast, more particularly southward ; but my correspondents, in all quarters of the island, mention the species either as a spring, or as a spring and autumnal visitant. In the month of April or May, it appears in large flocks along the line of the eastern coast,—on that of Wexford, Dublin, Louth, Down, Antrim, &c. As the whimbrel is not found to the westward of Ireland within the latitude of this island, it is interesting to know that these migratory bodies move as regularly along the western as the eastern coast. Thus, they are "very common, in April and May, near Tralee, in Kerry ;"† appear in large flocks about Roundstone, on the Galway coast, in May, and remain during that month, where they

* By the shooters in Belfast Bay (one of whom speaks from the experience of above half a century), this bird was never seen in winter. On the Dublin coast, and in Cork harbour, it is said merely to appear in spring and autumn. With respect to Great Britain, however, Mr. Selby remarks that "these birds are found upon most of our shores during the winter * * * rarely associated in companies of more than five or six in number" (vol. ii. p. 66). Mr. Yarrell observes, although this bird is "to be seen occasionally on many parts of our shores in winter, it is generally most plentiful in May, and again in autumn * * * on the way to and from the northern localities, &c." (vol. ii. p. 517).

† The late Mr. T. F. Neligan.

are unknown at other times ;* the same is reported of them on the coast of Donegal. They likewise take an inland course of flight, appearing, among other places, at the marshes below Killaloe, on the Shannon, every spring,† and in the high moory ground about Lough Conn, in Mayo.‡ Their popular name everywhere has the word *May* connected with it—as May-bird, May-fowl, &c.—in consequence of their appearance in that month. A popular error exists in some places, that they are the young of the curlew. This has arisen, not merely from the general resemblance of the species, and the whimbrel being always much the smaller of the two, but from its being also so much easier of access than the other, believed to be its parent. On the arrival of the flocks in spring, they are often very tame, and may be openly approached within gun-shot ; but persecution soon renders them wild.

Notes kept of the arrival of the whimbrel in Belfast Bay, for many years, announce its earliest appearance on the 10th of April (in 1843) ; and the next earliest on the 22nd of that month (in 1838 and 1845). It remains generally from about four to six weeks. Some were seen so late as the 18th of June in 1843 (the year of their earliest arrival), and in the following year, until the 14th of that month.

They re-appear very soon after the breeding season, having been observed every year, from 1839 to 1848 inclusive, in July, generally about the middle, but in 1845 and 1848 early in the month.|| The numbers gradually increase from the time of their being first seen. During August they are most numerous in the bay, whence they are chiefly gone by the end of September. They return in autumn, along the line of the eastern coast, towards their winter haunts, in much smaller quantity than they went forth in spring, not more than about one being seen in some years at the former, for ten at the latter, season : an ordinary flock will consist of thirty in the spring and of three in the autumn. The relative number on the entire coast will not, perhaps, be much

* The late Mr. John Nimmo, jun. † Rev. T. Knox. ‡ Mr. B. Ball.

|| On the 1st of August they have been shot at Dungarvan on the southern coast.

above this proportion. In Cork harbour, whimbrels are said to appear in considerable flocks in spring; but a few only to be seen in autumn.* My correspondents do not mention this bird as visiting the western coasts at the latter season; but its numbers are now so small where they do appear, that they might pass unobserved, though in spring the large flocks are conspicuous on the shores.†

Not only is the whimbrel, as already remarked, the only bird among our *Scolopacidæ* of regular double passage, but it differs from all the other species of the family in the much fewer numbers appearing during the autumnal than the vernal migration. Its course of flight, too, both in spring and autumn, differs from that of its congeners.

In spring, whimbrels, probably for want of company—no godwits, &c. being here—keep generally by “themselves,” and as such, are literally “a host;” but in autumn, they exhibit a very sociable disposition, and are frequently to be found in company with curlews—with godwits, too, they not uncommonly associate: I have obtained both species at the same shot. At this time they accompany the curlew in its prudential flights, as detailed in treating of that bird, and under a safer guardian the most trustworthy of friends could not place them. Never when under the surveillance of the curlew, but only when trusting to themselves, have whimbrels fallen to my gun. Like that bird, they fly much about during the autumnal nights, be these dark or moonlight; but they prefer the latter. They may always be distinguished from other species by the cry, resembling in sound the word *titterel*;—the provincial name applied to them in Sussex.‡ They fly from the sea inland, as well as in the opposite direction, and take both courses during every state of the tide; hence we may consider that they are night-feeding birds.

* Mr. Wm. Crawford.

† In the island of Islay, Scotland, the whimbrel is annually seen on its spring passage northward; but has not been observed at any other season by my informant.

‡ Knox, ‘Ornithological Rambles in Sussex,’ p. 8.

The whimbrel when unassociated with other species is generally easy of access; but the late Mr. T. F. Neligan, having shot several in the months of April and May 1837, near Tralee, remarked that the flocks were very watchful, one or two of the party being always stationed as sentinels on an adjoining height while the others were feeding. Those killed by him were found full to the throat with crustacea. In Belfast Bay, I have met with this species on the oozy banks, the gravelly beach, and on rocks; but an intelligent shooter, of greater experience than myself, states, that it is very partial to the grassy margin of the beach, and to the fields bordering the coast, especially in wet weather. A veteran sportsman, too, informs me, that many years ago, when the neighbourhood of Belfast was not a populous district as at present, the upland pastures were the usual resort of this bird, where it appeared in great flocks in spring. Within my own experience it has not occurred in such localities; but the low-lying meadows or pastures—such as “the bog-meadows”—are still occasionally visited during the spring migration, by large flocks. The last I heard of there was a flock of about a hundred birds that frequented them during the first week of May 1845; during which much rain fell daily in heavy showers. They appeared as often in the neighbouring oat-fields as in the pasture. A juvenile friend went in pursuit of them, when one of the birds, a little apart from the others, flew towards, and made a stoop at, his dog, until within about a yard of his head, on rising from which it was fired at and killed; it proved to be in very fine condition.

The whimbrel, like others of its tribe, differs much in size. A very fine specimen, shot in Belfast Bay in September 1834, which I had preserved, was in—

	<i>Inch.</i>	<i>Line.</i>
Length, total (stuffed)	18	6
——— of bill from forehead to point	4	0
——— from rictus to point	4	3
——— wing from carpus to end of quills	10	2
——— tarsus	2	8
——— middle toe and nail	1	9

	<i>Inch.</i>	<i>Line.</i>
Length of hind toe and nail	—	8
Tibia bare for	—	11

Another bird, being weighed, was 15 oz.

Over Great Britain generally, as well as Ireland, the whimbrel moves northward on its vernal migration, in large flocks. It is found in summer extensively throughout the most northern parts of Europe. In the Orkney Islands, it is said to breed as commonly as the curlew; but to remain no longer than is necessary to rear its young.* It was seen in great numbers in many places along the coast of Norway, but especially about Trondjeim (Drontheim), during the summer of 1843, by my late friend, Mr. G. Matthews, to whom and his companions it proved annoying by enticing the dogs away when grouse were sought for.

THE SPOTTED REDSHANK.

Dusky Sandpiper.

Totanus fuscus, Linn. (sp.)

Scolopax fusca, „

Is an extremely rare visitant.

THE following notice of a single individual contains all that can be positively stated of this species as an Irish bird. A brief communication respecting it was made to the first volume of the ‘Annals of Natural History’ (p. 157).

When a very young sportsman, and out shooting in Holywood rabbit-warren, bordering Belfast Bay, on the morning of the 22nd of August, 1823, I perceived at a distance a solitary bird, whose call resembled that of the redshank, but was somewhat different, winging its way over the sea towards Belfast. To my surprise and delight, however, the stranger made a sudden turn and

* Dunn, ‘Ornithological Guide to Orkney and Shetland,’ p. 85.

alighted on the beach at a short distance, which was scarcely done, until it became my victim. Immediately on lifting the bird, though I had never seen one before, I knew it to be the spotted redshank from recollection of Bewick's beautiful figure of that species. It was admirably killed for being stuffed, not a speck of blood being on any part of its plumage, or a wound anywhere visible. To prevent the possibility of its plumage being even ruffled from contact with my pocket, the bird was carried in my hand, and when I reached home, was most carefully (as I believed) laid aside, preparatory to my absence for a few hours. Alas! however, on my return, the beautiful prize was missing, but was eventually discovered;—served up at the dinner-table, in company with a curlew and other vulgar denizens of the shore. My boyish mortification may easily be imagined, as my good fortune in having obtained so fine a specimen of a bird never before known to visit the Irish coast had been the all-engrossing thought of the day.

An observant shore-shooter, who killed 108 redshanks at a shot from his swivel-gun, in Belfast Bay, early in Sept. 1846, remarked one of them to be not only different from all the rest, but to be of a species which he had never before seen. There can be little doubt, from his description, that it was a spotted redshank. Wm. Crawford, Esq., of Lakelands, near Cork, who shoots much on the water, is certain of having occasionally met with this bird, but has not preserved a specimen.*

There can be no doubt of its occurrence more frequently than we are aware of, though not coming under the eye of the naturalist. The species having apparently visited Cornwall as frequently as any other part of England, we should expect to meet with it more particularly in the south of Ireland. It is only a rare or occasional visitant to that country, and chiefly to the southern and eastern counties. Its occurrence in Scotland was unknown to Mr. Macgillivray; but Sir Wm. Jardine has seen two individuals which were shot at the same time in the Frith of Forth.† On the

* Dr. J. R. Harvey, 1848.

† *Brit. Birds*, iii. 201.

European continent, the spotted redshank annually migrates to the far north—within the arctic circle—to breed. It does not seem to be met with anywhere in abundance, like the common species, *Totanus calidris*. I have seen one which was killed in the neighbourhood of Rome.

THE REDSHANK.

Totanus calidris, Linn. (sp.)

Scolopax „ „

Is common around the coast: a small proportion only of those seen during autumn and winter breed in the island.

THIS bird appears to be much more numerous around the shores of Ireland than those of Great Britain, judging from the statements of authors in the latter island respecting it. Bewick remarks:—"This species is of a solitary character, being mostly seen alone or in pairs only:"—Montagu, that it "is not an uncommon bird upon many of our shores in winter:"—Fleming, that it "leads a solitary life on the sea-shore during winter:"—*—Selby, that "during the winter the redshank is found upon the sea-coast, and about the mouths of rivers, in small flocks:"—and Yarrell, that "a few redshanks are sometimes met with during the winter season, but the most of them migrate."

Even in the north of Ireland they are very numerous during winter, in all kinds of weather, though autumn is the season of their greatest profusion. Oozy shores, such as are covered by the *Zostera marina*, seem to be preferred, which may possibly be at least one reason of the great abundance of redshanks on the Irish coast, where there are so many bays of this description. But they are by no means limited to such localities. There is

* British Animals, p. 103.

considerable variety in the nature of the estuaries and loughs of Antrim and Down, Dublin Bay, Wexford and Cork harbours, the bays of Kerry and Connemara, &c., which all exhibit the species in very great numbers. Even to the low and jagged rocky shore, when exposed by the fallen tide, these birds are partial,—minute crustacea, and other objects which constitute their food, being plentiful in such places. Although large flocks have not been observed by the shooters to feed by night, small numbers have occasionally been seen to do so. The examination of the contents of the stomach of several redshanks, killed at different times in autumn and winter, in Belfast Bay, proved that small crustacea constitute their chief food : some shrimps, of tolerably large size, were observed in them ; one stomach, on being cut into, was so filled with crustacean remains as to give forth strongly the perfume of boiled crab or lobster. A few minute univalve shells, as *Lacuna quadrifasciata*, &c., had also been picked up.

This species appears in flocks in Belfast Bay early after the breeding season : on the 18th of July the young birds have been shot, and occasionally, though rarely, great numbers have arrived before the end of the month. From this period, or the middle of August, until late in spring—on the 1st of May, 1849, a flock of about a hundred was seen—they remain without any diminution of their numbers, except what may be killed, and they are too wary to admit of any great sacrifice in this manner, at least with the ordinary gun. The most I have heard of being killed with it at one shot were twenty-five, along with which a greenshank and two ash-coloured sandpipers fell. But the swivel-gun sometimes makes awful havoc among them. As noticed under the last species, 108 were killed at one shot early in September 1846, and a day or two previously 112 fell at a single discharge. I have often, like my correspondent, Mr. Poole, observed that the redshank appears to sympathize very much with wounded companions. “A flock (to use his words) out of which I shot four this morning, as soon as they perceived their brethren strewed upon the water, wheeled round towards them repeatedly, uttering the most piercing and vociferous cries, and seeming determined to lend

every assistance in their power." When the flowing tide puts them off their feeding-ground, rather than be driven within shot of any ambush on the shore, they adopt the curlew's custom—as particularly detailed in treating of that species—of retiring to rocky marine islets, several miles distant, about the entrance of the bay. Thither they follow the "flights" of that cautious bird; stationed a little apart from which, I have seen several hundreds congregated, patiently awaiting the falling of the tide. When much disturbed, at such times, they likewise betake themselves to the comparative solitude of Strangford Lough. To see a flock of not less than a thousand spring direct from the beach high into the air until they attain the elevation of the intervening range of hills which have to be crossed, and then, in rapid flight, bear straight onwards to Strangford, is an interesting and beautiful sight. During a few years of late, these flights were taken less frequently than before, the birds having discovered a tract of good feeding-ground, about two miles in length, on the Antrim side of the bay, bounded by a public road, which rendered it a kind of preserve, as no shooting was permitted. They remained there daily in great numbers, about the time of high water, for eight months of the year. A railway embankment has since been thrown up between the sea and this tract, and corn now waves over a considerable portion of it, where the redshanks and allied species so lately appeared in countless myriads. When spring-tides encroach on their territory, it is interesting to see them flocked on little floating masses of *Zostera*. To keep their enemies at a respectful distance, they will sometimes alight in water of such a depth that the entire legs are concealed and the under plumage wetted. It was comical, on one occasion, to see a redshank resting for a time on the top of a single plant of the bladder sea-wrack (*Fucus vesiculosus*), which rose to the surface from deep-water, and did not yield beneath the bird's weight.

Redshanks are well known to dive when wounded. They have frequently been observed in Belfast Bay, when feeding and getting gradually into water too deep for wading, to swim across where the distance was short, rather than rise and fly. They

often alight on the sea where it is deep ; but to the surprise of a shooter here, on one occasion (November 20, 1847), three of them appeared swimming about and busily feeding on the surface of water about eight feet in depth. From their turning quickly about in all directions, he at first imagined they might be grey phalaropes, or some rare birds ; but on his approach, they gave forth the well-known cry of the redshank, and he saw, as they took wing, that they were of this species. A redshank, pursued by a hawk, here, was observed by two men fishing, to fly direct for the boat in which they were, as if for safety, and when within about two yards of them, it dived completely under water six or seven times, so often as the hawk made a stoop. At length, the bird betook itself to the air, and was probably captured, as the hawk was gaining on it when they both disappeared from the sight of the fishermen.

What may seem timidity or fear on the part of the redshank, should rather be attributed to restlessness of disposition. It is in this respect on the shore what the blackbird is in the thicket. Its varied action on the ground is very pleasing, and the nodding of the head is often quite grotesque ; indeed, at Roundstone, Connemara, where the bird is numerous, it is commonly known by the name of *shake*,* on account of this habit. The restlessness of the redshank is manifest even on the wing, for not more than a moment does a flock present the same appearance. It is now a round ball, next instant shoots out like a sky-rocket, appears in single file, and, after assuming every imaginable form, perhaps rolls itself into a ball again ; the whole being done with equal rapidity and grace, whether it rises high into the air, or sweeps the surface of the sea.

Every month in the year the redshank may be seen about our shores, though in the breeding season not more than one will be met with for a hundred at other times. Little flocks, as well as single birds and pairs, occur on the coast in the height of summer. On the 13th of June, 1832, when visiting the Mew Island,

* The late Mr. John Nimmo.

a low tabular rock outside the southern entrance to Belfast Bay, annually resorted to by great numbers of terns (*Sterna arctica*, *S. hirundo*, *S. Dougallii*), for the purpose of breeding, a flock of seven or eight redshanks, betraying great consternation, flew frequently around us, never approaching nearer than about seventy yards; just before they appeared, a single bird for some time kept circling above us at the same distance, ringing its shrill notes upon our ears, and from its apparent uneasiness we concluded that its nest could not be far off. When upon the island, on the 24th of June in the following year, a similar part was played by a small flock of these birds, and but for their being congregated, I should have supposed they had nests in the locality;—even so they may have had, and their fears at our approach may have temporarily banded them together. In the same manner, I saw flocks of them on the 20th and 21st of June, 1832, about some of the low rocky islets in Strangford Lough. Our boatmen, who, earning their livelihood chiefly by fishing and shooting, knew much about birds, stated that redshanks breed on some of the islands every year, where they find their nests. These are said to be on the gravelly or shingly beach, like those of the ring dotterel, and to contain three or four eggs, which they correctly described as to size and colour.

When visiting a different part of this lough, on the 22nd of June, 1846, we saw a small flock of redshanks, and our boatmen assured us that they breed on the islands, placing their nest high up on the shingle, between tide-mark and the grassy margin. The men have often found their eggs, respecting which they could not be mistaken, as the birds were seen rising from the nests. In localities of a similar nature about Achil Beg and Galway Bay, small flocks and single birds were seen by us at the end of June and beginning of July, 1834. They breed on the Dublin coast at Donabate, where their eggs have been procured,* and in islands and marshes embanked off the sea, on the coast of Donegal.†

* Mr. R. J. Montgomery.

† Mr. J. V. Stewart.

With respect to inland localities,—a gentleman observed a pair of redshanks on the 11th of May, 1845, in a swamp near Killagan, about half-way between Ballymena and Ballymoney (Antrim), and from the manner in which they flew at his dogs, he had no doubt of their having a nest near the spot. In the Bog of Allen, and near Mountainstown, county of Meath, they breed;—as numbers do annually in moory swamps about Lough Conn, and on the banks of the river Mayo, in the county of that name.* Mr. G. Jackson (gamekeeper) has seen them about all the lakes and rivers he is acquainted with in Connaught;—“the upper Shannon and the tributaries of that river in the county of Roscommon—the river Suck and the Moy in Mayo—also at Lough Gara, near the town of Boyle.” He saw “more or less of the young every year, from 1828 to 1840, particularly when fishing on the river Lung, the principal tributary to Lough Gara.” I observed several redshanks on the banks of the river Shannon, between Limerick and Shannon harbour, on the last day of July, 1840, and imagined them to be indigenous birds which had been bred in some of the adjoining marshy tracts.

Naturalists, treating of this species as a *British* bird, seem to consider that all the redshanks frequenting the shore are bred in the country. They describe it as on the coast in autumn and winter, and retiring inland to breed, without, in so far as I have observed, alluding to any migration northward of Great Britain for that purpose. Of the numbers, however, that are on the Irish coast, the vast majority must have been brought up in more northern latitudes.

A friend whose residence was on the banks of the tidal river Lagan, near Belfast, observed that for about a month in autumn (September), and then only, redshanks annually resorted to the oozy borders of the river above Ormeau Bridge when accessible at low water.† In autumn and winter they sometimes appeared about a tract of low-lying meadows near that town, when flooded by heavy rains, and on the shore of Lough Neagh I have seen flocks

* Mr. B. Ball.

† On the 24th of December I once saw a few feeding here.

in September. They are, consequently, not so restricted to marine localities as in the south of Scotland, where the species has come under the observation of Sir Wm. Jardine. He remarks that "we have never seen them even as stragglers upon our lochs and rivers, as the greenshank and some other maritime *Totani* frequently are."* This author alludes only to marshes adjoining the sea, as the maritime breeding-places of redshanks in Scotland. As already noticed, they nidify on the shingly beach itself in some parts of Ireland. On the extensive gravelly banks at the mouth of the Stinchar, in Ayrshire, I was told, a few years ago, that they, as well as the oyster-catcher and ring plover, bred. Numbers, annually, form their nests on the gravel, like the ring plover, along the shores of Islay and the neighbouring islets, as I have been assured by those who have gathered their eggs.

I have rarely obtained examples of this bird in its handsome adult summer plumage, which differs much from that of winter, as well as from that of young birds of the year.

On the 23rd of July, 1826, I observed a solitary redshank on the beach of the Lago di Garda, in the north of Italy.

THE GREEN SANDPIPER.

Totanus ochropus, Linn. (sp.)

Tringa " "

Is only known as a rare visitant ; but has occurred at all seasons of the year,

As it has done in England. It is, however, of much more frequent occurrence there than in Ireland. In Scotland, Sir William Jardine remarks that this handsome bird is met with in about equal numbers with the greenshank.† It is far otherwise in

* Brit. Birds, vol. iii. p. 202.

† Ibid., vol. iii. p. 210.

Ireland, where one hundred greenshanks might be reckoned for every green sandpiper.

According to Mr. Templeton's journal, it has been seen four times at Cranmore, his residence near Belfast,—twice previous to 1800, once in that year, and in 1801. At "Brick-holes," Mays-bank, close to that town, one was shot early in the winter of 1822. At Stranmillis, about a mile distant, another was killed during frost and snow in the winter of 1823.* More lately, a bird believed to be of this species (but which was not obtained) was observed to frequent Conswater, in the vicinity of the town, for some time. In the winter of 1836-7, a taxidermist there had a green sandpiper sent to him in a fresh state from some of the northern counties. One, in the Belfast Museum, was killed by a person when snipe-shooting, in a bog between the river Bann and Rathfriland, county of Down.† A recent adult bird shot in the neighbourhood of Antrim, on the 25th of August, 1847, came under my notice; its stomach contained water-beetles, specimens of *Cypris*, &c.

A green sandpiper was shot in the month of October (?) about the year 1829, at Clontarf, near Dublin;—another, which I saw in 1833, had been killed a few years previously, and sent in a recent state to the metropolis. Mr. W. S. Wall (bird-preserver) informed me, in 1833, that, within the preceding seven or eight years, three fresh specimens, procured near Dublin, had been sent to him. Subsequently, one was shot at Malahide by Mr. Warren. On the 5th November, 1846, a recently-killed bird was purchased of a hawker in the metropolis. On the 17th of January, 1838, I saw (previous to its being skinned) a beautiful adult female which had been killed in Queen's-county; its stomach contained the remains of worms and a *Physa fontinalis*—the latter proving that it had been feeding in fresh water. In the month of February, 1836, one was killed about five miles from Clonmel.‡

* Rev. G. M. Black.

† The dimensions of this bird agree, in every part, with the description in Jenyns's 'Manual.'

‡ Mr. R. Davis.

The green sandpiper is very rarely seen near Waterford.* About the month of October, 1822 (?) one was shot at the sea-side, near Youghal, by Mr. R. Ball. In November 1835, a bird in full adult plumage was killed by Mr. R. Chute, in a bog about five miles from the sea, near Tralee. The same gentleman procured another which was shot in that neighbourhood about the 1st of October, 1846. Most of the above examples, of which particulars are known, appeared about fresh water.

The green sandpiper seems to have come more frequently under the notice of Sir Wm. Jardine, than any ornithologist in Britain; and, accordingly, an interesting account of it, as observed about his residence in Dumfries-shire, is given in his 'History of British Birds.' As information three or four years subsequent to what appears there (the volume was published in 1842), it may be mentioned that when at Jardine Hall, in October 1845, a specimen was shown to me which had been killed in the first week of that month. Between the middle of September and that period the species had annually been met with there, for several years, when on its passage southward. In one instance only had it been obtained in winter. It frequents the bogs in elevated situations as well as the low grounds.

The green sandpiper migrates regularly, for the purpose of breeding, to the countries of northern Europe. Its habits in England, as well remarked by Mr. Yarrell, "are not yet perfectly understood." It is only known in Ireland, to the present time, as occurring at uncertain intervals, and those chiefly late in autumn or in winter;—we know nothing of its breeding in this island.

* Dr. R. J. Burkitt.

THE WOOD SANDPIPER.

Totanus glareola, Linn. (sp.)*Tringa* „ „

Cannot be recorded with certainty.

To the following notice which I communicated to the ‘Annals of Natural History’ (vol. v. p. 8) nothing of consequence can here be added. “Mr. R. Ball describes a species of *Totanus* to me, which he saw for several years, about the month of June, frequenting a stream in Glenbower wood, near Youghal, and believes to have been this bird. In the late Mr. Templeton’s MSS., a sandpiper, considered to be of this species, is noticed as having been seen in the neighbourhood of Belfast, but, as in the preceding instance, in terms which do not warrant its introduction to the Fauna with certainty.” The description of a bird killed on the borders of Belfast Bay, in September 1844, and communicated by the shooter, exactly agrees with the *T. glareola*; but the specimen was not saved.

This species is but an occasional visitant to England, where it appears to have occurred even more frequently about the Land’s End, Cornwall, than elsewhere,*—a circumstance which leads me to believe that it must sometimes visit Ireland, and more especially the southern parts. It has not been noticed in Scotland (Jard., Macg.).

The wood sandpiper has a very extensive geographical range, and moves northward regularly to breed within the European Arctic circle. “Moist woods, and swamps producing willows and brushwood, are its favourite habitats, where it lives solitary, or, in the breeding season, in pairs.”†

* Mr. E. H. Rodd, in the ‘Zoologist’ (vol. i. pp. 143, 189); also Yarrell’s British Birds.

† Selby.

THE SANDPIPER.

Fresh-water Sandlark.

Totanus hypoleucos, Linn. (sp.)*Tringa* ,, ,,

Is a regular summer visitant to the lakes, rivers, and brooks throughout the island.

It is one of the late-coming summer birds, making its appearance in the north about the end of April or beginning of May. The earliest note of its arrival before me is that of one which I shot in Colin Glen, near Belfast, on the 21st April, 1836. On arrival, they set about the great business of the season—to increase and multiply;—and depart from the country soon after their brood (for with one they are satisfied) can accompany them. On the 15th June I once found a nest and four eggs, under the shade of a dwarfed willow, growing from a bank of gravel, at Ram's Island, Lough Neagh; and on the 28th of the same month met with another on an islet (visited by means of a *corragh*) in Portlough—a small lake near the extreme north-west of Ireland; it was well concealed from view amid the surrounding herbage, and contained two young birds. An unusual site was selected, some years ago, by a pair of sandpipers, which built their nest in a gooseberry-bush, in a garden (Mr. Grimshaw's) contiguous to a pond in the neighbourhood of Belfast. It contained four eggs when the circumstance was mentioned to me. This bird nidifies at the sides of streams far up in the mountains near Clonmel,* and in similar localities in the southern counties of Waterford and Cork.

The chief haunt of this species in summer is about fresh water; but it has occasionally come under my notice at this season as well as in autumn, along the sea-coast. On the 12th July, 1833, it appeared on the Skerries, rocky marine islets off the northern

* Mr. R. Davis.

coast of Antrim ; and a day or two afterwards at the little marine bay eastward of Port Ballantrae, near to the Giant's Causeway. At this celebrated locality itself, I remarked the sandpiper on the 16th July, 1839 ; and about the same time, at Red Bay, on the eastern coast of Antrim. In the middle of July, I have met with it on the rocky coast, near Springvale, county of Down. On July 21, 1840, I observed a pair at the head of the Killeries ; and three days afterwards, saw one at Clifden Bay, Connemara. I am disposed to believe that the bird breeds at some of these marine localities ; indeed, Mr. Massey, late of the Pigeon-house Fort, Dublin Bay, informed me that he had seen the young, in the holes of the walls extending into the sea near that place.

Early in the month of August invariably, and occasionally in the middle of July,* sandpipers, with their young broods, appear on the shores of Belfast Bay, towards its inner extremity, and along the banks of the Lagan, so far as they are subject to the flow of the tide. Three broods with their parents, or as many as twelve to fifteen, are occasionally seen together ; but much more commonly about half that number. Sandpipers generally keep by themselves ;—in one instance only have I known them to be killed in company with other birds, when one fell by night at the same shot with dunlins. Indeed, as I have remarked with some interest, their feeding-ground is different from that of the dunlin, ring plover, &c., these species being generally seen scattered over the banks in search of food, while the sandpipers keep along the margin of the water for that purpose. The sea-shore is the last place frequented previous to the bird's leaving the country. The 31st of August is the latest date at which it has come under my own notice about Belfast.

In spring, this bird very rarely visits the sea-side here ; but proceeds direct, on arrival, to its inland haunts. From these, the sandpipers with their broods move by easy stages to the sea. Those which breed about the mountain rivulets near Belfast, bring their young so soon as they are able to fly to the nearest

* July 14, 1846, is the earliest date noted.

pond, and remain there for some days until they gather sufficient strength to move onward. Towards the middle of July, they appear at such localities (then only do they ever visit them), and are sometimes very noisy,—the piping of the young and old together producing quite a concert, though certainly more of a shrill than sonorous kind. A relative, walking on the banks of the Flush, a mountain rivulet amid the Belfast mountains, on the 8th of July, met with eight sandpipers, chiefly young. One of the party, doubtless a parent bird, flew after, and circled several times around him and a setter-dog as they proceeded along the banks of the stream. It afterwards followed the dog through several fields, often flying angrily at his head and body, though apparently without striking him. As the young birds could all fly well, my friend was surprised at the pertinacity with which the dog was pursued. About a fortnight afterwards these birds had all left the locality.

Stones are the common resting-places of this species; but it has frequently been observed to perch on ragweeds (*Senecio Jacobæa*) growing in fields bordering its haunts, as well as on shrubby and other plants contiguous to water. Its facility of swimming and diving, respecting which many notes have been supplied to me, is well known. A bird, wounded by a shooter in Belfast Bay, having dived, he saw it run for a yard or more along the bottom—where the water was about a foot and a half in depth—as quickly as it could have done on dry land. Its neck was stretched out, its breast close to the bottom, and its wings in full use during its progress. I have myself seen the young, when unable to fly, take to the water for safety, and swim well.

In the appendix to the ‘Letters of Rusticus of Godalming,’ Mr. J. D. Salmon remarks, that he does “not think this bird breeds further south than Yorkshire” (p. 155). When meeting with pairs at Ogwell Pool, North Wales (May 12), and on the banks of the Leam, in Warwickshire (July 11), I imagined that they were probably breeding in those localities, as they would have been at similar places in Ireland; in the south as well as the north of which country they commonly nidify.

Sir Wm. Jardine, when writing his 'History of British Birds,' was not aware, either on the authority of others or his own, that the sandpiper visited any of the Scottish islands.* In the 'Historia Naturalis Orcadensis,' however, published in 1848, we have the statement that it "has been observed in several islands, as in Sanday, in Hoy, and in various parts of the mainland [of Orkney]." It is added that the bird appears to be only an occasional visitant to that group. When in Islay, in 1849, I was pleased to learn that the sandpiper breeds annually about the lakes of the island. On particularly questioning the gamekeeper respecting it and the dunlin, and showing him figures of the two species, he stated that the latter was unknown to him as breeding there; but that a pair or two of the *T. hypoleucos* came every summer to each of the two small lakes on the moor above Ardimersy Cottage, and, he had no doubt, to the other lakes of Islay also.

Eggs of the bird, obtained there since the preceding was written (and kindly sent to me by Robert Langtry, Esq.), have proved the correctness of my informant as to the species.

Of all our summer birds of passage, the sandpiper, so attractive from its beautifully bronzed plumage, lively motions, loud piping note, and graceful curving flight, is the most widely dispersed, and the least choice as to locality; a mere sufficiency of water, in any form, being apparently the only essential to its presence. In the petty tarns situated amid the sublime scenery of our lofty mountains, as at Lough Salt, in Donegal; on the low and extensive shores of our three greatest lakes,—Loughs Neagh, Erne, and Corrib,—around the richly-wooded and rocky shores of Killarney, as well as about lakes of every intermediate size and physical character, I have remarked this species. It is also found at the lofty source of our springs and brooks,—in the beds of rocky torrents and gently flowing streams, and along the banks of the largest rivers, until, in their gathered might, they move majestically to mingle with the ocean. Here again, on shores of

* Vol. iii. p. 217.

every description—the soft oozy beach, the sand, the gravel, about the Norway-like *fjord* of the Killeries (Connemara), and the iron-bound coast of Antrim, including the Giant's Causeway itself—its piping note proclaims its presence.

In the most varied scenery of the sister island, too, the sand-piper has attracted my attention. At Ogwell Pool, in the midst of the savage grandeur of North Wales; about the sweet and lovely Lake of Windermere; at the softly-gliding Leam, where it meanders through the rich pastures and meadows above the town of Leamington; at the lively and brawling river which hurries through the bleak and sterile mountain-pass of Glencroe; and about the gravelly sea-shore at Ventnor, in the Isle of Wight—the garden of England—have I been gratified by beholding it. At the wild and desert-like sandy reaches of the Rhine, below Basle,* the sandpiper has also claimed my admiration, and it was the first bird to welcome me to Greece; several, with their piping notes, hailing our party as we landed at the noble Bay of Navarino.†

THE SPOTTED SANDPIPER. *Totanus macularius*, Linn. (sp.)

HAS been publicly noticed in a few instances, as having been obtained in Ireland; but the bird erroneously so named by Bewick, which is merely *T. hypoleucos* in a particular state of plumage, was meant, in the instances which I have investigated, and not the true species. This will probably yet be found visiting the island. It was only first made known as a British bird from the occurrence of a single specimen in England, in September 1839.‡ A few other individuals have since been met with in that country. The spotted sandpiper is a common bird in the United States of America, moving from the south towards the north to breed, as the nearly allied *T. hypoleucos* does in Europe; thus representing the latter species in the Western Hemisphere, within which it is not found. In Norway, Sweden, and Germany, the *T. macularius* is occasionally observed.

* July 15.

† April 28.

‡ Yarrell, Brit. Birds.

THE GREENSHANK.

Totanus glottis, Linn. (sp.)*Scolopax* „ „

Is a regular autumnal migrant, and of occasional occurrence in winter.

THIS species is not quite so rare in Ireland as it would seem to be in Great Britain; where, as remarked by Mr. Selby, it is a scarce bird, “generally only to be met with about the period of its vernal and autumnal migrations.”* It is noticed by Sir Wm. Jardine as “a straggling visitor.”† Though of regular annual appearance in the north of Ireland, it comes in extremely limited numbers, and is one of the earliest species in arrival after the breeding season;—a fact to which our attention is directed by its peculiar cry. About the middle of July, it has always appeared in Belfast Bay; the earliest noted by me were seen on the 2nd of that month (1846), and on the 29th of June (1848). The specimen obtained at the latter date came under my notice just after being killed; it was beautifully and conspicuously spotted on the neck and breast with black, having a bronzed lustre; the spots becoming gradually larger downwards, towards the body. On the back and scapulars were dark bronze-coloured feathers, looking very handsome among those of the ordinary light-coloured brown. Like our other *Grallatores*, this bird is chiefly here in the month of September. Its very limited numbers—generally three or four in a flock—vary little; during some years, however, (in 1822 or 1823, in 1835 and in 1843,) more than usual appeared. On the 14th of September, 1835, a bird-preserver had received six of them; being more than he had obtained in any previous autumn. They are extremely wary. I have known, in one season, three of them to be frequently seen and pursued by fowlers for six or seven weeks, by

* Vol. ii. p. 87.

† Brit. Birds, vol. iii. p. 205.

the end of which time only, they had all fallen singly to the gun. In another autumn, a similar number were pursued as long without one having become a victim. About the 1st of September, 1843, eleven greenshanks, together with a number of knots, grey plover, and dunlins were killed at one shot here, with a swivel-gun.

The greenshank is readily known, on the shore, from the most nearly allied species—the redshank—by superior size; its note, too, though generically similar, at once distinguishes it from that bird. It sounds like the word *twee*, prolonged, and uttered moderately slow, three times. The redshank's note is often uttered singly, but occasionally so frequently as five times, and then usually in a hurried manner. The two species sometimes associate: I have known two greenshanks and twenty-three redshanks to fall at one discharge from a shoulder-gun. Although the latter is a wary and restless bird, the former is still more so, as I have had the opportunity of judging when they were feeding in company; the most trivial sound from a distance alarms it. On the oozy banks and gravelly shore of Belfast Bay, the greenshank may be observed feeding busily—wading very deep in search of its prey,—its partiality for the fresh-water rivulets that course through the mud-banks at low water being manifest. On the borders of Larne Lough, I have observed it feeding. A few specimens, shot in the months of November, December, January, and February (17th), in the north of Ireland (at Coleraine, Belfast Bay, and Strangford Lough)—have come under my notice, but none have yet in the later spring months.

In autumn and winter, the greenshank is met with regularly in little flocks, consisting of about six individuals, in Dublin Bay,* and I have seen two specimens which were shot there in the month of March, in different years. From August until about April, small numbers are said to frequent Cork harbour; in Bantry Bay they have been observed; and “two or three may be daily seen, during the winter months, flying up and down the stream

* Mr. R. Ball, and Rev. G. Robinson.

at Blennerville, near Tralee, when the tide is out.”* The localities which have been named in connexion with the greenshank, are all of a marine or estuary nature. About inland fresh water, I have not known it to be killed in the north of Ireland, and once, only, on the part of the river Lagan subject to the flow of the tide, near to the Royal Botanic Garden, Belfast. The bird had previously frequented the place for a fortnight. Temminck mentions the gravelly borders of rivers as frequented by this bird, and very rarely those of the sea.

I am not aware of their breeding in Ireland, but Mr. R. Chute, who considers greenshanks to be common in Kerry, believes that they breed at Caragh Lake, in that county, from the circumstance of his having seen them at the upper part of it in pairs, at different times during summer, though he never found their nests. The people of the neighbourhood assured him that the birds remained there the entire summer. The lake is about two-and-a-half miles from the sea, and situated between mountains; it is five miles in length. The greenshank was observed at Clifden, or Roundstone Bay, Connemara, in July 1844.†

The contrast of the snowy-white and dark plumage renders the greenshank an attractive bird; it varies considerably in size. The redshank and it are considered, by some persons, to be the worst eating of all the shore birds that are commonly served up at table. A bird-preserved has remarked to me that the fat of this bird is white, and not orange-yellow, like that of the redshank.

When H.M.S. *Beacon* was in the Bay of Navarino, in April 1841, one of the officers, on the 29th of that month, brought me a greenshank, shot by him on the sea-beach, contiguous to an extensive marsh, which I subsequently visited. In a proper climate this would be a most suitable breeding-haunt for the species, and, as two or three more birds were seen, I could not

* Mr. R. Chute;—who once saw a large flock of greenshanks there.

† Rev. G. Robinson.

but think it probable, the season being then so far advanced, that they might breed there.

Mr. Macgillivray has contributed to the third volume of Audubon's 'Ornithological Biography' an interesting account of the greenshank, as observed by him in the Hebrides.* Mr. Selby ('Edinb. Philos. Journal') and Sir Wm. Jardine ('Brit. Birds,' vol. iii.) have treated pleasingly of it as seen by them in its breeding-haunts in Sutherlandshire.

THE AVOCET.

Recurvirostra avocetta, Linn.

Is an extremely rare visitant.

THE earliest notice of its occurrence, of which I am aware, appeared in Rutton's 'Natural History of the county of Dublin' (vol. i. p. 341), where it is remarked—"A.D. 1767, in winter, was shot in the Lots, near the North Wall, by Robert Bevin, sexton of Christ Church, a bird very rarely found here, being properly an Italian bird, called *Avosetta* and *Beccostorto*, from its bill, generally three inches and a half long, and often turned up near half its length. It is the *Recurvirostra albo nigroque varia*, Willughby, *Ornithologia*, Tab. 60," &c. The following brief note was communicated by me to the 'Annals of Natural History,' in 1840: "The late B. S. Ball, Esq., of Youghal, informed me, some time since, when looking over continental specimens of this bird with him, that, many years ago, he shot an individual of the same species near that town." "Mr. Wm. Warriner, of Bannow, on the southern coast of Wexford, states, that he once saw an avocet scooping in a marsh near his residence; and remarks, that it patted the ground with the convexity of its bill."†

Major Walker once observed two avocets on the marsh of

* As may be expected, it visits the island of Islay. I have seen specimens which were shot there. The species is noticed as an autumnal visitant to Orkney.

† Mr. S. Poole;—communicated in 1843.

Castlebridge, near Wexford. "They were very wary, running on the slimes, and flitting away low under cover of the banks, like kingfishers." He could not meet with these birds again, though going repeatedly in pursuit of them; but they remained in the locality for some time, having frequently been seen by persons resident there. An avocet was obtained a few years since near Castletown, Bear Haven.* "A pair of adult birds, in beautiful plumage, were shot by Wm. Crawford, Esq., in Cork Harbour, in January 1848: the first about the 5th of the month, when both were seen together; the second was procured three weeks afterwards: both specimens have been carefully preserved."† One was seen on the Dublin coast, in the same month, by Mr. R. J. Montgomery. The occurrence of others in the south has been reported to me, but not with sufficient accuracy for notice here.

Avocets bred sparingly until of late years in a few of the fenny districts of the east of England; but they are now only irregular visitants to any part of that country. They are said by Dr. Fleming and Mr. Selby (but without any particulars being given or localities named), to have been met with in Scotland. Mr. Edmonston, however, mentions Zetland as occasionally visited by them. They would appear not to migrate far north on the European continent for the purpose of breeding; but to keep chiefly to the south of the Baltic Sea. In June 1826, I was much interested in meeting with them about low marshy ground, between Leyden and Haarlem, in Holland.

THE LONG-LEGGED PLOVER.

Himantopus melanopterus, Meyer.

Charadrius himantopus, Linn.

Is of extremely rare occurrence.

IN the winter of 1823 or 1824—as recorded by me in the 'Proceedings of the Zoological Society' for 1834—Mr. R. Ball had,

* Mr. G. Jackson, gamekeeper.

† Dr. Harvey, of Cork.

some years previously, spent a considerable part of a day, endeavouring, though unsuccessfully, to obtain a shot at one of these plovers, which he saw in a field near Youghal. In 1837, I was told by Mr. T. W. Warren of a specimen (seen by him when recent) having been killed some time before at Clontarf, Dublin Bay. One in the possession of Mr. R. J. Montgomery was shot in the month of January 1836 (?), when flying over the river Robe, within six miles of Lough Mask, county Mayo. Mr. Richard Chute, writing from Blennerville in February 1846, remarked, that Mr. Fosberry, who resides in that village, saw a few of these birds, in company with lapwings, about twenty years previous to that time, near Adare, county of Limerick.

This species is only known to visit England and Scotland at irregular intervals. It does not migrate to the north of Europe, and is hardly known in the western parts of that continent which are southward of the British Isles.

THE BLACK-TAILED GODWIT.

Limosa melanura, Leisler.

Scolopax limosa, Linn.

Frequents the coast in autumn and winter—more especially at the former season—in very limited numbers.

ALMOST every autumn for many years past, a very few of these birds have been obtained in Belfast Bay ; and there is little doubt of the species being a regular autumnal visitant to Ireland.*

A few still breed in the marshes of England ; but the numbers that do so are becoming annually less. I have not seen any notice of their having bred in Scotland ; and they are not known

* A bird-preserver in Belfast, questioned on this subject in 1838, stated, that he was pretty sure of having received one or two black-tailed godwits to be set up every autumn for the preceding fifteen years, or since he had commenced the business of taxidermist.

to have done so in Ireland. A pair which were shot early in July 1834, about the banks of the Royal Canal, near its western termination, in the county of Longford, may have contemplated nidification there. I saw the specimens in Mr. Glennon's shop, Dublin.

This godwit comes in extremely limited numbers to the north of Ireland, in the autumn, and sometimes early in the season. A young bird was shot in Belfast Bay, on the 26th of August, 1831, and at the beginning of the same month of 1837, two were killed.* September is the usual time of its appearance, and also of that of the bar-tailed godwit;—after October it is very seldom met with. I had not known its occurrence in the north in spring until the 6th of March, 1846, when one was shot at the last-named locality. But, indeed, until about that period, the black-tailed godwit was known only to the most observant shooters there (who pursue their occupation both by night and day) as an autumnal visitant; it was then shot at mid-winter likewise. On the 12th of June, 1828, three birds were seen in this bay, by Dr. J. D. Marshall, which both he and a shooter who accompanied him believed to be the black-tailed godwit. They appeared to be in very fine plumage, but would not admit of an approach within gun-shot. If not of this species, they must have been the *Limosa rufa* in its full red summer plumage.

In the autumn of 1822, when common godwits were so remarkably abundant in the north of Ireland, more of the black-tailed species were likewise seen than either before that time or since. Five, which were killed at one shot at Whitehouse Point, Belfast Bay, were sent to a bird-preserver's, as well as several others. One or two specimens only are commonly received by him in a season. At that time also (end of September 1822) four were shot from a flock consisting of sixteen or seventeen individuals, by the oldest shore-shooter of the bay, who had never killed the bird before, though he had observed it and remarked its different colour and superior size to that of the common

* Dr. J. D. Marshall.

godwit. It is occasionally obtained inland in the autumn: one was shot at Lough Beg (adjoining Lough Neagh), about the 1st of September, 1836;* and in the last week of August 1841, another fell to a snipe-shooter, in marshy ground near Belfast. I have seen one, which was killed from a flock near Portumna, on the river Shannon, in April 1836. The black-tailed godwit has been shot at Portmarnock on the Dublin coast:—at the end of September 1840, many of these birds, along with ruffs, were brought (but whence was not communicated) to the metropolis for sale. In the first week of November, and at other times, a few have been met with on the coast of Wexford. On that of Waterford,† too, they have occurred, and have been observed, though rarely in autumn, at Youghal.‡ They are said to be “not uncommon about the month of December, in Cork Harbour, where, on the 2nd of November, 1847, six were killed at a shot:—in September, the adult bird has been obtained there.”|| In the winter of 1840, and again in that of 1847–48, two specimens were procured on the coast of Kerry.¶

Great confusion has been caused by this bird having been called red godwit by some British authors, while the common one is the *Limosa rufa*; but the barred tail of the latter, and the black tail of the former, are sufficient to indicate the respective species.

The *Limosa melanura* is an interesting bird in captivity. During visits to the Gardens of the Zoological Society, Regent's Park, London, in May and June 1849, the sight of eleven of these birds, which are kept along with other grallatorial species, in one of the inclosures, always gratified me. The first day I saw them was very warm. They were all standing in the same position, on one leg, with the other tucked up so as to be wholly invisible, the bill buried in the feathers, and the eyes closed. The next day that I went was equally fine, and the hour of my visit the same; but they were all actively stirring about and calling, as if on the

* A coleopterous insect, half an inch in length, was found in its stomach. In that of others the minute univalve shell *Paludina muratica*, Lam., has been observed.

† Mr. Poole and Dr. R. J. Burkitt.

‡ Mr. R. Ball.

|| Mr. Wm. Crawford to Dr. Harvey.

¶ Mr. R. Chute.

sea-shore. They appeared quite happy. It was interesting to observe their natural habit of driving the point of the bill into their soft oozy feeding-ground, here exemplified by several of them at the same moment probing the layer of straw with which the floor of their residence was covered. The third day on which I paid my respects to them was very cold in the shade; the wind easterly. They all had their bills wholly buried in their dorsal plumage, and most of them had their eyes closed; but they nevertheless kept continuously calling, without in the least degree changing their attitudes or moving the bill from its state of repose. Occasionally, two or three would call at the same moment, the rule among them seeming to be that a continuous note was essential. It was amusing to behold the vibration of the body of the bird, when, — supported on only one leg, — the call was uttered with the bill “engulphed” in the plumage of the back. A ruff in the same aviary with them, as observed on one of the warm days, seemed also quite contentedly at home, and displayed the well-known pugnacity of the species, by striking with his bill any of the godwits that came within his reach. On one of the warm days, he took possession, for a time, of a large shallow pan of water, and would not suffer a godwit to partake of, or cool its feet in the liquid.

THE COMMON OR BAR-TAILED GODWIT.

Limosa rufa, Brisson.

Scolopax Japonica, Linn.

Is a regular autumnal visitant, remaining occasionally until spring.

FROM the manner in which the best British ornithologists speak of the two species of godwit in Great Britain, it would seem that the bar-tailed is more common, and the black-tailed more rare, in Ireland than in that island.

The oozy banks of Belfast Bay are a favourite resort of the

bar-tailed godwit, and it occasionally appears here very early after the breeding season. On the 31st of July, 1827, I saw large flocks; on the 20th of July, 1846, some appeared; on the 6th July and two or three other days about that time in 1842, the call of the species was heard by a shooter to whom it is well known; but the birds probably passed southward, as, until the 16th of August, when I was informed of the circumstance, the call had not been again heard. In August, these birds commonly arrive;* but no matter how early they come, September is the month in which they are most numerous, and generally in the early part of it.

The number of godwits varies remarkably in different years, in some being very scarce, in others abundant. The first that I met with, was, when a young shooter, in 1822, in which year large flocks appeared on the 7th of September, on the short pasture and the sandy beach at Holywood rabbit-warren, Belfast Bay. Their tameness surprised me. Of all birds that I had ever seen, they most freely admitted the approach of the fowler, who had only to walk directly towards them, and choose his distance from which to fire as they were feeding or reposing on the strand. After a number were killed from a flock on the ground, the remainder, though taking wing on hearing the report, would sometimes pitch again among the dead and wounded before the perpetrator of the deed of blood, having again charged his gun, could reach the spot to lift them; when a second volley would, in addition, lay some of the others low. The pockets of a shooting-jacket at that time usually sufficed to hold the few birds that might fall to my gun; but the number of godwits proved too great for them, and, notwithstanding all that could be done in the way of squeezing and pressing, the long bills and legs of the poor victims could not be concealed, but kept dangling outside, thus serving as an announce-

* According to notes of their earliest appearance during a few years, made at my request by the shooter alluded to (the base of whose house is washed by the sea), they were observed as follows:—in 1838, the earliest were two, which he killed on the 10th of September; none appeared again until the 17th of the same month:—in 1840, two, seen on the 4th of August, did not remain, but flew southward; August 15, one, and August 19, nine noticed; September 12, about sixty were in a flock:—in 1841, four were observed on the 12th of August.

ment to the shooters in the village, when I returned homeward, of the easy prey that awaited them. At a different part of the shore on the same day, thirty-one godwits were killed by two persons shooting in company, a number which would probably have been doubled, had one of the guns not missed fire at the best shot offered during the day: this was at "the great flock of from 200 to 300," which from a distance of four or five yards, with the gun resting on a ditch-bank, was sought to be fired at: the birds were so close together that less than thirty could hardly have fallen had the gun been discharged. This being on a Saturday, the report of the number of these birds seen, had time to spread widely before Monday morning, when the field—or rather shore—was taken by so many shooters, that the execution done on the poor godwits was very great: about twenty or thirty birds were killed by single guns. For several days they continued in considerable numbers; but experience teaching them like other bipeds, they became gradually less easy of approach. They were in very good condition, and sold at this time in Belfast at sixpence a couple. Godwits remained later than usual in the bay that season, and occasionally fell to my gun until the 24th of October. At the beginning of September, when these birds appeared in such numbers in Belfast Bay, they were very abundant in Larne Lough, the next inlet of the sea northward—and of a similar oozy nature—on the Antrim coast.

Since 1822, godwits have in some seasons appeared in considerable numbers; but not so plentifully as at that time. In 1836, a shooter of my acquaintance killed about a hundred in Belfast Bay:—in 1839 he obtained twelve in one day, killing six at a single shot. On September 15, 1840, he and another person, by firing at the same moment from a boat, killed on the bank 5 godwits, 19 knots, and 3 dunlins. After a few more shots they had bagged 15 godwits, 26 knots, 1 teal, and 5 dunlins, these last killed from being in the way, or associating with their betters: my informant has particularly remarked the partiality that godwits and knots have for keeping together, which they do in flight as well as on the ground—they seem more social than the godwit is with the

curlew, or even than the latter and the whimbrel are with each other. About September 1, 1841, he procured godwits, pigmy curlews, ring-dotterels, and dunlins, at one shot :—the common fowling-piece is alluded to in these instances.

Great changes have of late years taken place with respect to the godwit. It was quite unknown during winter in Belfast Bay until the season of 1837-8, when, about the middle of January, two were seen together, and one of them shot ; the same occurred at that period of 1841, after a week's continuance of severe frost and snow. In the winter of 1843, some birds were observed ; and on the 21st of December, 1844, a flock of four appeared, from which three were shot ; another flock of nine was seen before and after that date. From the winter of 1844 to that of 1848-9, godwits have frequented this locality : a flock, consisting of about two hundred birds, was seen more than once within the last fortnight of December. They take their departure in the morning from the bay, as believed, to Strangford Lough ; their time of flight being somewhat later than that of the wigeon. Ash-coloured sandpipers or knots (*Tringa canutus*) bear them company, and to them they are, doubtless, indebted for the hint of this precautionary measure, which the latter have long adopted. In the season of 1846, godwits were observed literally in thousands at Strangford Lough, from the 16th to the 21st of February, which a shooter spent there ; the weather being remarkably mild at the time. In the last week of February and first week of March, 1847, they were in similar numbers in that lough. Several great flocks would be seen at one view on wing, the largest of them containing not less than five hundred birds. Even a larger flock, probably amounting to six hundred, appeared in Belfast Bay on the 21st of December, 1847, during a week after which time a great many were seen there, mixed with innumerable hosts of ash-coloured sandpipers, redshanks, &c. In Carlingford Bay, as well as in that of Belfast and Strangford, godwits have annually wintered in some numbers since 1843.

Until the last few seasons, the appearance of the godwit in spring at Belfast Bay was almost unknown ; one only having

previously been obtained within about twenty years (April 8, 1837). On the 12th of March, 1845, three were seen; and on the 6th of that month, in 1846, a flock of from twenty to thirty birds, seven of which, killed at a shot, were brought to me, In Strangford Lough, they have already been noticed as seen in March; one was shot there, near Kirkcubbin, from a large flock. early in April 1849. How long they generally remain in this lough I am unable to state; the information given respecting the locality being derived merely from persons visiting it at the periods mentioned.

Two specimens of the *Limosa rufa* which came under my examination—one shot on the 8th of April, 1837, in Belfast Bay, and the other (a female) near Dublin, on the 29th of May, 1838—were both in winter plumage; no indication of a reddish feather appearing. One killed in Belfast Bay, so late as the 15th of October, was in nearly full summer attire, the under side of the neck, the breast, and thence to the point of the tail on the under side, being red; the only indication of a change to winter dress being exhibited in an intermixture of a few white feathers with the red on the throat.

The size of the godwit, like that of other *Grallatores*, is very variable. Seven birds, killed at the same time, on the 6th of March, differed much in this respect, and, on dissection, all the small ones proved to be males, and the large ones females; the bills of the latter, from forehead to point, were from four to four and a quarter inches long. Others, which I have killed, exceeded four and a half inches;—a young bird of the year, obtained on the 24th of August, had a bill only two inches in length. At the end of October I once shot a godwit of little more than half the ordinary weight, and hardly exceeding a grey plover in size.

Of the gizzards of three godwits examined by me, one contained the remains of vegetable; another of soft animal food; the third was almost wholly filled with gravel, which, together with fragments of shell, was in the others also.

This species, which is of frequent occurrence on the shores of Donegal, is described by my correspondents to be common in suitable localities—the soft oozy or sandy beach being preferred—southward from those already named to Dublin Bay, Wexford, Waterford, and Cork Harbours, and round to the western bays of Kerry and Galway. It is chiefly known as an autumnal visitant, but remains in some places until spring. About Lough Derg, an expansion of the river Shannon, it is said to be met with every year in the months of September and October:—in April 1847, two were killed there:—it is, however, much more of an estuary or marine bird, than the black-tailed godwit.

The *Limosa rufa*, although so much more common than the black-tailed species, which still continues to breed (though very sparingly) in England, is not known to nidify in any part of the British Islands.

THE RUFF.

Machetes pugnax, Linn. (sp.)

Tringa „ „

Visits Ireland on its autumnal migration southward not unfrequently; but very rarely appears on its vernal movement northward.

AN adult male in full plumage shot in company with two others in the Creagh bogs, near Castledawson, county of Londonderry, in May 1821, came into the possession of the late Mr. John Montgomery, in a recent state. It was preserved for his collection, and is now in the Belfast Museum. In March 1833, I saw in the possession of Mrs. Desmond, Dublin, two ruffs and a reeve in full nuptial plumage, which had been shot about the river Shannon. The collection of Mr. Massey, Pigeon-house Fort, Dublin Bay, contained in 1833 an immature specimen of the ruff which had been killed there: subsequently one was shot “when frost was on

the ground," at Douce mountain, county of Wicklow. Six ruffs, brought to the metropolis for sale from the county of Kildare, were taken in snares on the 13th of March, 1838: they all wanted the ruff, though ascertained by dissection to be males. On the 5th of April that same season, six other males were brought to the Dublin market. They do not appear here so often as every year;—specimens obtained at the end of September 1840, of October (two from Kildare) and November 1847; and in September 1849, have come under my notice in collections.

Mr. George Bowen mentioned to me in 1839, that ruffs had been shot in the autumn of the two preceding years, near Bogay, county of Donegal, where he had seen flocks of about twelve birds: they were always tame, and occasionally associated with other species. Two males (without ruffs) were obtained by Mr. John Kinahan in August 1848, at Annagh (Tipperary), a few miles from Birr. They formed part of a flock of six, which accompanied lapwings while feeding on the flooded grounds. The species had been seen there but once before, about two years previously, according to an old sportsman of the neighbourhood, who on that occasion killed two from a flock such as that seen in 1848.

In the autumn, ruffs have been killed about Belfast as follows.—The first noted, on September 18, 1821. On the 26th August, 1822, one was shot among some dunlins, near Conswater, where that river joins the bay; its weight rather exceeded 3 oz.,—five more were seen at the same time. Either in that or the preceding autumn, one was shot at a pool of water close to the town. At the 'bog meadows,' less than two miles distant, a young bird of the year, though of full adult size, fell to my own gun in August 1828. These meadows were deeply inundated that year when ready for the scythe; and a vast flight of snipes, on their southward migration, was tempted to alight and remain a few days. When in pursuit of them I sprang the reeve, and saw but the one; next day, however, another was seen, and shot in the same locality. On the 25th August, 1833, a young male bird, which came into my possession, was shot at a river bounding the town;

its tarsi were of a greyish-green colour. A fine adult reeve was obtained on the 24th of August, 1835, on the shore of the bay; and five others were subsequently procured that autumn, three of which (killed on the 23rd and 24th September) came under my examination: two were adult birds (one a male), and the other a young bird of the year;—they were all shot singly. On the 5th September, 1838, three appeared on the sea-shore, one of which was killed by a person who had obtained them several times. He remarks that they are partial to alighting on the little grassy patches rising above the beach in preference to the beach itself; that, when disturbed, they fly high like snipes, and, like these birds, come suddenly down from a height in the air, and further resemble them by returning to the place whence they were sprung;—so late as the 29th November that year (1838) three were seen. On the 10th of September, 1841, a ruff appeared in company with some redshanks on the shore, where on the 25th of September, 1842, two adult males were shot at Adams' Point, and the same number likewise procured between the middle and end of September 1844. In 1845, one only—obtained on the borders of the bay at Garnerville on the 29th of October—was known to have been killed. On the 2nd of that month, in 1848, a reeve was procured at the same shot with four or five knots, and was the only one of the species in the flock.

All my information on the ruff as an Irish species, is now given, from which it appears that the bird has not been met with by my correspondents on the southern or western coast,—a circumstance which, at all events, implies its comparative rarity there.

The ruff formerly bred annually in large numbers on the fenny eastern counties of England, but has now almost ceased to do so. I have not seen any record of its having ever bred in Scotland or Ireland. It is now known to the three countries chiefly as an autumnal visitant, when passing southward from more northern breeding-haunts.

I do not know any bird that varies so much in size as the ruff. I have seen some young birds one-third less in dimensions than others killed at the same time, though

apparently in equally good health; it is only less variable in this respect than in the colour of the plumage and legs. When visiting the Zoological Gardens, Regent's Park, London, in the spring of 1833 or 1834, I was informed by James Hunt, one of the keepers, that a bird which had been there for two or three years, had a different coloured ruff each summer. This is probably the same bird alluded to by Mr. Yarrell.* Mr. R. Ball has observed the same fact in the Zoological Gardens, Dublin, with respect to a ruff which was received there in full plumage, and has twice changed since; the colour being very different each time. Montagu states, on the contrary, that those which came under his observation had, annually, the same coloured ruff: it would thus seem that even in this adornment of the nuptial season individuals are not constant.

The two birds noticed as shot at Belfast Bay, in September 1844, I saw and obtained some time afterwards. Their sex had not been noted by the preserver. They are both of full adult size, though young birds of the year,—if “the fore part of the neck and breast of a dull reddish ash” be characteristic of that age. Temminck gives, as a diagnostic character, what is also copied as such in ‘Jenyns’s Manual,’—“the two middle [tail] feathers barred; the three outer ones at each side always of one colour.” In one of these specimens all the tail-feathers are barred; but the barring gradually diminishes from the central to the outer feathers; the outside one has one bar; the next, two bars; next, three, &c. In the other specimen, the three outer feathers have each one blackish band at the tip, the extreme edge of which is narrowly margined with reddish-white: such are the only markings of these feathers, as elsewhere they are plain-coloured. An adult male (shot in the middle of September) that I examined, has, at the end of the two middle tail-feathers, an obscure blackish band. The outside feather at one side of the tail has one blackish band, the next two bands, the third three, all well marked; but the opposite side of the tail in this same individual (which is in the collection at the Belfast Museum) does not correspond. It seems to me vain to describe any marking as permanently characteristic of this species.

When visiting Holland at the beginning of June 1826, I had an opportunity of seeing ruffs in their halcyon abode—the fens of that country, where they were abundant, and quite regardless of persons walking within a few yards’ distance. A group of them, stationed on a grassy bank close to a road crossing a fen between Utrecht and Gorcum, not only evinced no shyness, but gazed with the greatest *nonchalance* on the passers-by: their tameness of course arising from their being unmolested. On passing through the Pontine marshes, lying between Rome and Terracina, about the middle of the following month of August,

* Brit. Birds, vol. ii. p. 582.

a few birds which I saw feeding near the road were believed to be of this species.

A relative has mentioned to me, that when he was leaving Rotterdam for London a few years ago, in spring, a huge basket containing from two to three hundred ruffs was put on board the steamer. The incessant fighting of these birds proved the grand source of attraction to the passengers during the voyage. Their crib was one great battle-field, in which every individual seemed to be at the same moment engaged, and determined to keep up the warfare as long as life itself lasted. It was a continual battle and treading down of the wounded and dying. About one-half of them were slain before the vessel reached London. On inquiry of the person who had charge of them, "Would it not have been better to place them in smaller baskets?" the reply was that it would have been quite the same as to the fighting and deaths produced. A number of whimbrels were caged with the ruffs, under the impression, as was said, that they might stay the feud, but, as we have seen, in vain. Several baskets of dead ruffs were also put on board at Rotterdam. Doubtless, many of the departed birds which are annually on sale in spring, at Hungerford market, have met with their deaths on the high seas in the manner related.

THE BROWN OR GREY SNIPE.—*Macroramphus griseus*, Leach ; *Scolopax grisea*, Gmelin.—Has not been observed in Ireland, but, probably, will yet be so;—neither has it been in Scotland. Six individuals are recorded as obtained in England, from the first noticed in Montagu's 'Ornithological Dictionary,' in 1802, until 1845, when the second edition of Yarrell's 'British Birds' appeared. Nilsson states that it has been procured in Sweden. Stragglers only, however, have visited Europe. This bird is common on the shores of the United States, &c., of North America.

THE WOODCOCK.

Scolopax rusticola, Linn.

Is a regular winter visitant, remaining about five months :
a few breed annually.

MANY more of these birds winter in this island than do in England or Scotland. The general time of the appearance of the woodcock in the north of Ireland is the month of October ; but it has occasionally appeared in September. An octogenarian sportsman has frequently, in his younger days, when this bird was much more numerous than of late years, shot it in the neighbourhood of Belfast in the last week of September, and once so early as the 8th of that month : another sportsman, many years ago, killed one here in a potato field, on the first day of partridge shooting—the 20th of September. By a third, a woodcock was shot on the 21st of that month, in the heath at Ennishowen (Donegal). According to notes of its appearance about Belfast during the last twenty years, two only announce its presence so early as the first week of October, and one of these relates to the fine dry autumn of 1842.

For some time after arrival, woodcocks are chiefly met with among the heath on the mountains, and, indeed, whenever the weather is open are to be found there by day. But in favourite localities, where quite undisturbed, they will, during the finest weather, remain in cover throughout the day, from the date of their arrival to that of their departure. In some small wooded glens near Belfast, where a gun was not permitted to be fired, I have seen them daily, when I wished, during that period :—from being unmolested, they admitted an approach within a few paces, and were always seen quietly resting in the shade on dry spots, generally beneath young spruce-fir trees, which were branched nearly to the ground.*

* Sir Humphrey Davy has remarked that :—“ A laurel or a holly bush is a favourite place for their repose : the thick and varnished leaves of these trees prevents the

Migration.—Observations connected with the migration of the woodcock have been chiefly made on the eastern and western lines of coast. In January 1838, I was informed by the late George Matthews, Esq., of Springvale, county of Down, that in the Ards, the most eastern portion of the island—forming a narrow but rich tract of land between Strangford Lough and the Irish Sea—the species was then only plentiful about the period of arrival and departure from the country. When a strong easterly wind detained them in spring they were abundant. Until the beginning of the present century, they were so there at all times, from October to March; in proof of which, it was stated, that they were of so little value as to be commonly baked in pies!* The clearing away of the cover in which they found shelter, preparatory to the ground being cultivated, has banished them; and, except at the seasons named, a few only are to be seen. It was at the same time (January 1838), mentioned, that about twenty years previously, Captain Donnan bagged thirty brace there in one day—in rough open ground—and would have procured many more but for his ammunition being exhausted. The next day, he took the field amply laden with all “appliances” for their destruction, but not a bird could be found;—they had all moved off in the course of the night. On the previous day they had doubtless been awaiting favourable weather for departure. Woodcocks (according to Major T. Walker, of Belmont, near Wexford) are met with in numbers in the mountain of Forth, in that county, on their arrival and before their departure, and sportsmen are always on the look-out for them at such times. After resting a day or so among the fern (*Pteris aquilina*) on the sea-banks, they proceed to the mountain. Moonlight nights †

radiation of heat from the soil, and they are less affected by the refrigerating influence of a clear sky, so that they afford a warm seat for the woodcock.”—‘Salmonia,’ p. 332, 2nd edit.

* Not, however, just so common as in the year 1589, when, according to Payne, one might purchase in Ireland “a dosen of woodcokes for iiiid.”

† Nights when the moon is full are generally believed in England* and Scotland† to be the most favourable for the migration of the woodcock; but Mr. Selby has “found that these birds always come over in the greatest bodies in hazy weather.”

* Knox, ‘Birds of Sussex.’

† St. John, ‘Wild Sports,’ &c., p. 223.

and east or west winds, according to the season, are believed by the people of the district to regulate the time of their coming and going. "When they gather in numbers previous to leaving the country in spring (and long after they have left the covers) they are to be met with under the large loose stones of the mountain." This account is very similar to that of Sir John Cullum, on the autumnal and vernal appearance, &c., of the woodcock on the coast of Sussex, contributed to the second volume of Pennant's 'British Zoology.'

With respect to the western coast of Ireland, Major M'Ilwray, of Westport, informed me in 1840, that a friend and he had often, at the migratory periods, shot from twenty-two to twenty-five brace in a few hours about Bundoran, on the coast of Donegal. When in Achil, in June 1834, I learned from Lieut. Reynolds, R.N., of the Coast Guard Service (who had been a few years stationed there), that he had met with woodcocks on that island as early as the 10th of October, but that they are most numerous from the 1st to the 20th of November,* and again from the middle of February to the end of the first week in March: the most he had killed at such times in a day were sixteen brace; he had not uncommonly bagged fourteen or fifteen brace.† Some remain during the winter in Achil, though the

* Montagu, in the Supplement to his 'Ornithological Dictionary,' gives, on the authority of Captain Latham, a similar account of woodcocks in Portugal—that they are very plentiful in the month of November, when he has killed fourteen or sixteen couple in a day's shooting; they become scarcer as the winter advances, and plentiful again in the beginning of March, on their return northward: they therefore move still farther south than that country. The partiality of this bird to the extreme west, as Ireland and Portugal, is also mentioned by Montagu; but Sir Humphrey Davy states, that "in the woods of southern Italy and Greece, near marshes, they are far more abundant [than in Ireland], and they extend in quantities over the Greek Islands, Asia Minor, and northern Africa."—'Salmonia,' p. 333. Mr. H. E. Strickland informs us, that "so abundant were woodcocks at Smyrna during the severe weather following the Christmas of 1835, that many were killed in small gardens in the midst of the town."—'Zool. Proc.' 1836, p. 101. But as to the actual numbers obtained by sportsmen in the Morea, see the concluding extract from Mr. Lloyd's paper a few pages farther on.

† Captain Manley has informed me that once when he was at Holyhead (Wales) a person living there went out to shoot woodcocks, expecting them to have arrived on their autumnal migration, and was not disappointed, having returned in two hours with about eighteen or twenty brace: the next day they were all gone. When that officer was stationed at Malta a flight of woodcocks came, and great numbers were

island is destitute of wood. They were remarkably scarce in the winter of 1833-34, and had not been plentiful in the two preceding years.*

Mr. G. Jackson (gamekeeper to the Earl of Bantry at Glengarriff for the last ten years) states, that on the woodcocks' arrival from their northern breeding-places they are always seen first on the very western shores. He has invariably found them near Dursey Island some days before they appeared inland. This fact is well known to sportsmen living on the western coast of Ireland. In the south-west of England likewise—in Devon and Cornwall—woodcocks are said to appear on their autumnal flight long before they are seen on the north of that country.†

Many kinds of birds are driven, by severe weather, from Scotland across the Channel to the north of Ireland, and, among others, the woodcock. When there is an appearance of a continued frost or snow, it is commonly remarked by sportsmen that we shall have woodcocks from Scotland. During the great snow-storm in the spring of 1827, I had fair evidence of the truth of this remark. In beating some covers in the neighbourhood of Belfast that had been most carefully gone over the day before without a woodcock being sprung, these birds were met with in unusual numbers; and, from what I know of the habits of the species, in connexion with the locality and the state of the weather, I should certainly say they were not supplied from other quarters in Ireland. The atmosphere (it may be remarked, though without any reference to the woodcock) was in a most singularly humid state that day, so much so as to render the

killed: they remained for two or three days. Mr. Wilkinson, jun., British Vice-Consul at Syra, stated to me when there, that woodcocks are never seen in that island in autumn when the wind is southerly; they appear from October to December (but stop only for a day) in great numbers, fifteen to twenty brace being often killed by one person in a forenoon. A gentleman residing at Berlin has remarked to me, that woodcocks are never found there in winter, and a friend at Giessen, that they appear in numbers in March on their northward migration.

* Some remarks on this subject will be found in the 'Wild Sports of the West,' p. 298-302; edit. 1838.

† Selby, vol. ii. p. 108.

powder in the pans of our guns, which were of the best description, but with the flint locks of that time, so damp that it would not ignite.

A rather singular circumstance occurred to a friend when cock-shooting at Redhall (Antrim): he fired at a woodcock, which alone he saw, but on going to the spot where it fell he found, to his surprise, a fine cock-pheasant dead at its side—the keeper, who was present, observed the latter bird to fly up within range of the gun just at the moment the trigger was pulled at the woodcock. This species is the favourite bird of pursuit with trained Peregrine falcons, as particularly noticed in the account of the latter, in the first volume of this work. The woodcock is very expert in escaping the sportsman; seeing whom, when sprung, it wheels or turns most adroitly to avoid him. I have known an old sportsman to be much annoyed by his failing to get a shot at one which, for a considerable part of a winter, frequented a certain portion of a glen on his property, near a bridge. The bird, on being raised, always wheeled suddenly under the arch, and escaped.

On examination of the stomachs of thirteen woodcocks, killed at different periods and in every kind of weather, from October to March, one was found to contain only small pebbles; ten, vegetable matter, chiefly *Confervæ* (in one instance an aquatic moss); several of them worms of small or moderate size, insect larvæ, aquatic *Coleoptera*, together with a few pebbles. The vegetable matter, of which there is often a considerable quantity, probably remains intact after the gastric juice has acted on the worms and other animal food, and thus appears disproportionate to the other contents.

Varieties.—The woodcock is subject to considerable variety in plumage, becoming sometimes white or fawn-coloured, and occasionally exhibiting a mixture of both colours. One correspondent has a specimen with white wings, and another mentions a black woodcock (not *Scolopax Sabini*) having been shot in December 1841, in Queen's-county. One with cream-coloured primaries was shot at Castlereagh,

near Belfast, in the winter of 1818 or 1819; and, in February 1845, a bird with about a dozen white feathers in one wing, and a few in the other, was killed at Tollymore Park.

Major T. Walker, in a letter to me, written in April 1846, and dated from the Lodge, Kyle, Enniscorthy, remarked:—"I have shot a great deal of cock and snipe in Carniola (by Laibach), Styria, and Hungary, and never found, among the woodcocks, more than the one species such as we meet with in Ireland; but the year before last I shot here, in Wexford, a cock different from any I have ever met with, and of which I have since seen a specimen in the cabinet of Natural History at Vienna, under the name of *Scolopax saturata*. Although in full condition, it was much smaller than the usual cocks; the breast was as light-coloured as in the common, but of a reddish instead of a greyish-brown. On the neck, back, and shoulders, there was not any of the *yellowish*-brown markings, but all were of a rich, deep brown. The entire of the brown colouring of the breast, back, shoulders, &c., would be given by different shades of burnt terra-sienna. The first long feather of each wing exhibited a marked difference from those of any other cock I have seen, by being barred with blackish-brown and buff on the outer web, where others have a plain buff or white stripe, or are chequered with these colours. The form of the dark markings also differs, by being pyramidal. The feathers resemble the second long ones in the wing of the ordinary woodcock." Major Walker observed further, at a subsequent date, in reply to some queries:—"I am well acquainted with the difference in size and plumage of the male and female woodcock, as my favourite diversion is cock and snipe-shooting; and I have, I believe, shot more of these birds here (co. Wexford) each year than any person in the neighbourhood. On ground which I had in Styria, I shot upwards of ninety cocks in one month (November); still I never met with a woodcock of which I had the least doubt except this one. The man who has attended me shooting for upwards of ten years, on taking it up, said instantly, 'Here's a sort of cock we never met before.' Looking at Yarrell's plate of *Scol. Sabini*, it is certainly not the bird, as it resembles a snipe more than a cock, and has not the brown bars on the top of the head, nor the barred wing-feathers [1st primaries]." I have thought it proper to put the above description on record, though unable to give any positive opinion on the species of the bird. Possibly it may have been a small specimen, differing in colour only from the ordinary woodcock. The *Scol. saturata* of Dr. Horsfield, *as originally described*, it could hardly have been. His description of the species is:—"S. rostro subelongato apice tuberculato, supra ex nigro saturatissimo castaneoque variegata subtus pallidior.

"This is one of the rarest of Javan birds, found once only near a mountain-lake at an elevation of 7,000 feet above the ocean.

"At the base of the lower mandible is a small whitish spot; the anterior part of the neck is transversely banded with black and chestnut; the breast and abdomen are sooty-black, with irregular dusky bands." All that is said of dimensions is, length twelve inches. (Dr. Horsfield on Birds of Java in 'Linnean Transactions,' vol. xiii. p. 191; 1821.)

Mr. Dillwyn stated, in his 'Fauna and Flora of Swansea,' published in 1848

that "the white woodcock, mentioned by Bewick for its remarkable reappearance in three successive winters, is still preserved at Penrice Castle" (p. 8).

Numbers reported to have been killed.—The 'Sporting Review' for October 1847, contains an extremely interesting article (dated "Sweden, December 1846") from the pen of a distinguished sportsman, Mr. Lloyd, entitled 'Woodcock and Snipe Shooting' (p. 249-260). The author descants on the sport to be had in various parts of Europe, and gives his experience in Ireland very fully. I shall extract what is said of numbers killed.

"A field-officer of the Tipperary militia, with whom I was in company many years ago, told me that he himself was present when fifty couple were bagged by an acquaintance in a single day! It was for a considerable wager; the individual performing the feat being unlimited as to the number of guns, &c. I forget the name of the cover, but it was one of the best in Ireland, and of course strictly preserved. Again, the late Lord Glentworth assured me that, in 1842, Mr. Matthew Barrington and his party, probably consisting of five or six guns, bagged in one day, on Lord Limerick's property, Dromore Wood, seventy-two couple. Though in former years, from 1814 to 1822, I have occasionally shot in various parts of Ireland, I never had any extraordinary success with cocks; but this was attributable to my not happening to shoot in good covers when the frost was severe and the snow deep on the ground. At such times, by the concurrent testimony of every one, many of the woods in that country are literally alive with those birds. Nevertheless, I have frequently met with excellent diversion. One day I bagged fifteen couple; another day, twelve; and on many different occasions from ten to eleven couple. During the several excursions made to that country I shot hard upon 700 couple. * * * Should a man be fortunate enough to get access to a succession of first-rate covers, he might, I have little doubt, readily kill 500 couple to his own gun in a single season. But to obtain this privilege is a matter of great difficulty. * * * At Mueruss, Killarney, one day, Mr. Chichester Oxenden killed, with a single barrel, twenty-two and a half couple; but this gentleman is a very first-rate shot, particularly at cocks.

"The system of battues, as with us, is now very general; but these seldom take place until about Christmas, by which time the severity of the weather usually drives the cocks from the mountains into cover. The show is then often immense, and the slaughter proportionally great. Individuals have assured me that on these occasions they have seen from 200 to 300 couple on the wing in the course of the day, and there is no reason to doubt the statement. For my own part, however, I do not think I ever flushed more than from twenty-five to thirty couple; but then I usually shot in a quiet way, and alone.

"Taken altogether, my best season in Ireland was 1820. I commenced on the 5th December, and finished towards the end of March. Generally speaking, the weather was mild and very rainy, and of course unfavourable for woodcocks." [The number of all kinds of birds, &c., killed is given; but it is very small in every

instance except in the case of the woodcock and snipe, of the former of which 414, and of the latter 1,310, head were bagged.]

“ But after all, the cock-shooting, even in Ireland, is hardly to be compared to what is to be met with in some other parts of the world. For instance, Sir Hyde Parker, in a letter to me dated June 10th, 1844, when speaking of a trip to the Mediterranean, from whence he had recently returned in his yacht, says,—‘ We killed 450 cocks in ten days, and the party who preceded us killed 650 in the same number of days.’ Great as was the slaughter described by the baronet, it was equalled by Messrs. Oxenden and Berkeley. From a printed list sent me by the former, it appears these gentlemen bagged, in twenty-one days’ shooting in the Morea, 862 woodcocks;—their best day was eighty.”

Woodcocks may, on the whole, be stated to have become gradually scarcer with the improvement of the country and increase of population; but in some seasons there is a considerable increase to the ordinary numbers: the last in which this occurred was the winter of 1837–38. In the month of January about 100 brace were obtained by occasional shooting in Tollymore Park, county Down, the seat of the Earl of Roden; and the gamekeeper considers that he saw as many as eighty brace in one day: *—130 brace fell to the gun of the Hon. John L. Cole, at Florence Court (Fermanagh) and Hazlewood† (Sligo); thirty brace being shot before Christmas, and the remainder in February. In the neighbourhood of Belfast also, more were seen late in the season than had been for many years: at the termination of a severe frost towards the end of January, great numbers were on sale in the shops of the town. About Downpatrick, too, they were said to have been abundant during the frost. Throughout that winter, indeed, they were particularly plentiful in the shops at Belfast; but the supply was said to have been derived from the neighbouring Scotch counties of Ayr and Wigton.

Mr. Bell, many years gamekeeper at Shanes-Castle Park (Antrim),

* In the severe snow-storm of 1827, three gentlemen on a visit here, and not going out before noon, killed and bagged seventy-five brace in three days; as they did not look after wounded birds, many more which had fallen by their guns were afterwards picked up.

The gamekeeper has, with a brace of pointers, shot eight brace during a forenoon in the heath skirting the plantations of the park; within which, aided by a boy to beat the covers, he has obtained ten brace in the same time.

† A few winters previously (as I learn from Lord Enniskillen) sixty-five brace were killed at Hazlewood by three guns, in as many days.

informed me in 1839, that many years previously he had known twenty-two brace of woodcocks to be killed there in a day by one gun. About thirty years before that time, he was in attendance on Lord O'Neill, at Killarney, when his lordship and Major Higginson killed, to their own two guns, in three or four days, 173 brace.* A sporting friend visiting at Ross, county of Galway, in the winter of 1842 or 1843 mentions that seventy brace were killed by five guns during three days' shooting about Christmas;—twenty-seven and a half brace were bagged on one of the days. It was considered a bad year for woodcocks in that quarter. There is still, he states, excellent cock-shooting in many of the county Galway covers.

Departure.—In March the woodcock generally takes its departure from the north of Ireland, and is rarely seen at the end of the month; so late as April the 5th, 1833, two appeared near Belfast; and in 1836, the gamekeeper at Tollymore Park shot four and a half brace on the 7th, and three and a half on the 11th of April—much the latest *migratory* birds he had ever met with. At Ennishowen, in the most northern portion of the island, a sportsman assures me that he has seen woodcocks in the heath when April was far advanced: here also they have occurred particularly early in the season. But for what has previously been stated (p. 238), we might expect this to be one of the first parts of Ireland for them to touch at in autumn, and, consequently, one of the last for them to leave in spring.

Woodcocks in Islay.

The island of Islay, off the western coast of Scotland, has been noted for furnishing good woodcock-shooting, of the truth of which I had

* Daniel, in his 'Rural Sports' (vol. iii. p. 172), mentions, but without stating time or place, that "in Ireland, the Earl of Clermont shot fifty brace in a day," adding, "but then it should be premised, that such was the abundance of these birds as to be sold in some parts (for instance near Ballyshannon, in the county of Donegal) for one penny each and the expense of powder and shot." Ravensdale Park, one of the seats of Viscount Clermont (a title lately become extinct) at the base of the high mountains between Newry and Dundalk, is apparently one of the finest localities I have ever seen for woodcocks when driven from the mountains by frost or snow.

* The volume whence this is extracted (the octavo edition) was published in 1807.

some means of judging, whilst spending the month of January, 1849, at Ardimersy, on its south-east coast, with a kind relative who rents the best sporting portion of the island, including the choicest covers for coeks. Since the present intelligent head keeper (Peter Mackenzie) came there nine years ago, these birds have been considered to be becoming annually scarcer, excepting in the season of 1846-47, when they were plentiful. On the best day that winter, it is stated, that fifty-three birds were killed by four guns, and about as many more seen; twenty-seven fell to the keeper himself. On one day that season fifty were killed by four guns about Islay House; said to have been the greatest number ever shot there. Mr. Campbell and the keeper (taking, I believe, different sides of the cover) reckoned how many "flushes" of coeks there were in the course of a day; when the one counted 115, and the other 121; the same bird would, of course, in some instances be sprung more than once. This was about the greatest number ever flushed during one day in the Ardimersy covers,—the best in Islay; 1,000 birds are said to have been killed that season at Ardimersy and Islay House together; and the half of that number to have been obtained in other seasons.

The winter of 1848-49, to the end of January, was considered the worst season for woodcocks ever known on the island.* We shot daily (five guns, and with the aid of ten beaters), from January the 1st to the 6th inclusive; and though for the last four of these days there had been more severe frost than known there for many years, about twenty-five brace was the most we saw in a day, the half of which was the greatest number bagged within the same time.† In the covers at Islay House, about the latter number (twelve and a half brace) were killed during two days, at that period. All persons questioned on the subject agreed that the westerly, north-westerly, or northerly winds bring the coeks to the eastern or Ardimersy side of the island. They also attribute the small number of birds seen here this season to the prevalence of south-east winds, which almost constantly prevailed throughout November, December, and January. The wes-

* Sometimes there is as good cock-shooting in February as in any other month. By beating the heathery glens the keeper has had good sport in March. One day in that month Mr. Campbell, jun. and he, shot, the one eight and the other eight and a half brace on the high mountain heaths. The former number was likewise bagged by the keeper during two hours, in March 1848.

† The largest and reddest birds proved on dissection to be females.

terly wind is said to drive the birds from the other side of the island to the eastern on account of better shelter, though there is very good about Islay House,—deficient, however, in the bottom or low cover which woodcocks like. I was struck with the correctness of the preceding remark on the 15th of January, when, although the weather for the previous ten days had been excessively wet, a considerable number of cocks were seen in the covers; the wind being westerly. It changed to south-east in the afternoon, and though not blowing nor raining, the same covers, on being beaten next day, did not contain more than one for ten birds of the day before. A herd, on the mountain above the covers, saw four or five in company at twilight on the 15th flying in a westerly direction. Snow and frost on the mainland of Scotland have always been remarked to drive woodcocks in numbers to Islay. The keeper has never met with them in quantity after arrival from higher latitudes, but has seen them so in spring when about leaving for the north. He imagined this increase to come from the mainland of Scotland; but is it not more probably from Ireland? The earliest seen by him in autumn appeared at the end of September,* and the latest in spring, early in April, except in one season, the summer of 1844, when a few remained.† At the beginning of August, eight were flushed together, and believed to be parents with their two broods. One or two had occasionally been seen on their twilight flight during that summer. Woodcocks are considered here to leave the covers during the ordinary period of their stay, for the heaths, in open weather, as they cannot bear the drip of the trees during long-continued rain.

Woodcock shooting, one of the most “exhilarating” of sports, was enjoyed in perfection at Islay, during the few days that the ground was crisped by frost,—the pleasantest of all times for exercise independently of the satisfaction of being able to walk throughout the day without wetting the feet. In this shooting there were attractions here

* In beating the extensive plantations at Dunskey, near Portpatrick, Scotland, on the 21st October, 1844, for pheasants and other game, we saw one woodcock, the first met with there that season. On the 26th, six brace were seen; from which time they continued to increase, and were met with during the winter, as many being in the plantations in mid-winter as at the migratory periods: sixty brace were killed by occasional shooting.

† P. Mackenzie, when keeper at Wynyard Park, Durham, once killed five woodcocks on the 2nd of April, which was more than had ever before been killed there on one day.

which we have not in Ireland, great numbers of black-game being seen, the old males of which noble species frequently rose "on jetty wing" before us; and though it was legally, too late in the season to shoot them, they were not therefore the less admired. The graceful roe-deer, unknown in the more western island, often sallied from the covers in little troops, but were allowed to pass unharmed, as were the fallow-deer also, which are common in some places. Pheasants, snipes, hares and rabbits were daily added to the bag, with frequently wood and rock-pigeons and golden plover.

Most extensive ranges of the finest covers, being all wholly wild (around the shooting-lodge only, or in the demesne have trees been artificially planted), were greatly the more attractive on that account; and many of them, occupying the sides of mountains and other elevated grounds, afforded from their borders, or the paths made through them for the purpose of shooting, extensive and magnificent prospects over land and sea. The island itself exhibited great variety of surface. The lower ranges of mountains are ruggedly picturesque; the higher are of an opposite configuration, and with their grey, sterile summits have a simply majestic aspect. Little tarns here and there shone forth in their hollows; and abundance of natural wood clothing the ground at various altitudes, imparted a finished appearance to the whole. The iron-bound coast of the island displayed at all times, around its innumerable grim, jagged promontories, the dashing, snow-white foam, while far within them, quiet little bays stole up as it were into the land, from the storms of ocean, to enjoy the calm and placid beauty in which they reposed. The islets lying off the coast of Islay were of various scenic character, some bold and rocky, others level and green as the most verdant lawn. The lofty Paps of Jura—grand objects, owing to their fine conical form, whencesoever they are viewed—rose comparatively near, while the eye swept the whole range of ocean along the western coast and far to the north and south of Cantire and its tributary islets, over which, in the distance, towered the undulating mountain-profile of Arran, the additional purity of whose aspect under snow denoted its superior elevation to all other heights within view. A clear atmosphere rendered Rathlin and the northern mountains of Ireland (Knocklaid, &c.) distinctly visible.

Breeding of the Woodcock in Ireland.

All the particulars on this subject which I had learned until January 1839, were then published in the 'Annals of Natural History.' They shall be repeated here, with the omission of the comments upon them, but with the addition of the positive information since acquired.

Of the woodcock's actual breeding in this country I have not seen any record, and of its presence in summer only the following notice, which appeared first in the 'Belfast Commercial Chronicle,' and subsequently in the 'Magazine of Natural History,' vol. ii. p. 87. "On the 8th of August, 1828, a fine woodcock was shot in Florida demesne, county of *Down*; as it was seen in the course of the spring, it is supposed to have remained in the country since last winter." In the county of *Kerry* one of these birds was observed in the month of July 1832:—it is thought proper to mention odd birds seen at this season, as they can hardly be presumed in every instance to have been solitary individuals, though their mates may have escaped notice. In the county of *Antrim*, at the opposite extremity of the island from *Kerry*, a pair of woodcocks bred at Claggan, the property of Earl O'Neill, in 1834. The gamekeeper, in the month of April that year, found a nest containing four eggs, all of which were successfully incubated. It was placed in a slight depression of the ground under a hazel, and had a little grass and moss in the bottom for the reception of the eggs: the bird was very tame when on the nest, and permitted the keeper's approach within a yard:—the tameness of the woodcock on its nest is, indeed, mentioned by Pennant and Latham, and from the observation of many persons who have witnessed it, seems to be universal. In that year (1834), also, I saw a young woodcock in the shop of Mr. Glennon, bird-preserved, &c., Dublin, who mentioned that it was shot at Wilton, county of *Wexford*, and was received by him in a recent state on the 8th or 9th of May: he at the same time stated, that in the preceding summer of 1833, a young bird, shot in company with one of its parents, at the seat of Lord de Vesci, in *Queen's-county*, was sent to him to be preserved. Capt. T. Walker, of Belmont, *Wexford*, favoured me with the following particulars, in May 1837. "As to the breeding of woodcocks in this country, I was, in the second week of

May, sent a couple of young ones half-fledged,* that were taken out of a nest at Wilton in this county, the seat of Mr. Alcock. The nest was on the ground among brushwood, and the cry of the young birds like the sound produced by a child's whistle; this is the third year they have bred at Wilton. At the time I received the young birds, there was at Ballyarthur, county of *Wicklow*, the seat of Mr. Bailey, a nest with four eggs in it." Capt. Walker subsequently mentioned the woodcock as breeding in the covers of Killoughrim Wood, Wexford, and remarked that the young which he had examined, "although fully as large as old birds, had not got the strong feathers in the tail, but a soft curly down instead." In the month of June or July 1836, a woodcock was shot, and another seen about the same time at Springvale (Down), the residence of Major Matthews. On the 4th of June, 1837, an old female bird was killed at the vale of Ovoca, Wicklow. In May 1838, a woodcock was captured at Stormont, near Belfast. In the month of June 1837, a woodcock was seen at Shanes-Castle Park (Antrim), by Adams, the gamekeeper, who stated that about ten years previously he had seen a young bird which was found by a man engaged in cutting whins—among which the nest was placed—near Glenarm Park, in the same county. An adult bird was also seen there in the summer of 1840 or 1841. At Markree Castle, county *Sligo* (the seat of E. J. Cooper, Esq.), a brood of four young birds was met with at the end of May 1838; the first known to have been produced there. Three pair at least reared broods in Gurteen Wood, county of *Tipperary*, in the summer of 1841.† Young native-bred woodcocks were sold that season in Dublin market, and an adult bird was procured alive in the month of June, at Malahide, a few miles from the metropolis.‡ In 1842, a gentleman informed me that two or three pair had bred for several years lately at the country seat of a relative of his in the county of *Carlow*. At Divernagh Glen (*Armagh*), within three miles of Newry, two pair bred in 1844.¶ In July that year, one or two old birds were seen by the gamekeeper in Hillsborough Park. Two broods were observed at Donard Lodge, adjoining Tollymore Park, in the summer of 1842; and in that of 1843 two nests and one brood of young birds. At Clanvarrachan, two miles from Castlewellan, and in the same district as the last-named place, a nest was discovered for

* One of these was kindly sent to me by Capt. Walker. † Mr. R. Davis, Jun.

‡ Mr. R. Ball.

¶ Mr. James Mac Adam, Jun.

the first time in 1843. In 1845 a number of nests—"from a dozen to twenty"—were said to have been observed in the demesne of Florida. The four last-named localities are in the county of Down. On the 1st of May, 1848, a young woodcock was caught in a field near a cover at Powerscourt, Wicklow. It was apparently about six weeks old, which seemed far advanced for that late spring. The specimen was presented by Colonel Greaves to the Museum of Trinity College, Dublin.*

As Florence Court, the seat of the Earl of Enniskillen in *Fermanagh*, would be a most suitable breeding-haunt for the woodcock, I inquired when there some years ago if nests had ever been found, and was replied to in the negative. Lord Enniskillen having now (Oct. 1849) kindly questioned his present and former keepers, informs me that the bird was never known to breed there by either, and that the latter had never heard his father speak of having seen the woodcock in summer, as he certainly would have done had such a circumstance occurred;—"thus (as his lordship remarks) there is what may fairly be considered equivalent to the evidence of three generations of keepers (grandfather, father, and son) against the woodcock having bred in the covers at Florence Court."

To the preceding mere casual notices, I am happy to be enabled to give the observations of several consecutive years at one locality. These were communicated to me by Mr. James Creighton, gamekeeper to the Earl of Roden, and relate to Tollymore Park, in the county of Down, the residence of that nobleman.

This park is beautifully situated at the base of the mountains of Mourne—which rise to nearly 3,000 feet in altitude—and possesses considerable variety of surface, abundance of wood of various size, with occasional moist open glades that even in the driest summer would afford food to the woodcock. In 1835, the gamekeeper first (though living there since 1828) became acquainted with the fact, that these birds continued throughout the summer in the park. The first nest he saw, which had the appearance of a partridge's or pheasant's, was situated in a young plantation, at the foot of a larch fir. It contained four eggs, on which the old bird sat so close as to allow him and other persons to approach within a foot. When they came very near,

* Mr. R. Ball.

she was always observed to hide her bill to its base in the grass or withered ferns about the nest; the eggs were all productive, and were (he thinks) incubated for three weeks. The young left the nest just after birth, and were not again seen until able to use their wings, when they frequently appeared about the place: the male bird remained about a dozen paces from the nest during the incubation of his partner. From other woodcocks having been seen in the park that summer, it was believed that they must also have had nests, but the one only was discovered; eventually, however, a second pair of woodcocks was sprung along with five young ones, the old birds taking first to flight: the young—completely feathered, except on the head and neck, where down was still displayed—were able to fly over the trees, whilst those produced in the nest alluded to, were but three days “out.”

In the summer of 1836, my informant saw in one day five old woodcocks in the park (the same bird, he is certain, could not have been twice reckoned); and though he had not seen any of their nests that year, he on one occasion saw three young birds. He is of opinion that woodcocks pair before leaving this country in the spring for more northern climates,* and remarks, that in their evening flight at this season they “twist” amazingly, the hinder one following the foremost through every curve or sinuosity of its course, which is extremely rapid. Their call may now be expressed by the word *hisp*, his accurate repetition of which has brought them back when flying past him; during the breeding-season they, in addition to this, have calls which sound like *waap-waap—weep-weep*, succeeding each other, and repeated as here set down: both sexes are considered to make use of the two calls.† At the season of incubation, they call at early dawn, and their flight is now very different from that in the month of March, being slow or with the wings scarcely moving. Occasionally they may be seen circling about “as if in play,” at all events, describing such a course as evinces that they cannot be in search of food. In winter, woodcocks have a regular line of flight from the covers to their feeding-ground; and my informant, by taking his stand at particular spots, has shot many of them.‡

* I have frequently remarked that they kept in pairs, or that a pair would be sprung from near the same spot throughout the winter, both in covers and on the mountain heaths.

† When quietly sprung in winter, I have heard them utter a low note.

‡ The Rev. G. Robinson, when residing at Parkview, Tanderagee (Armagh), re-

In 1837, three nests were found at Tollymore, the first early in the month of April, when it was surrounded with snow; they were all sheltered by young trees, and one of them within twenty yards of where a nest had been the preceding year: in each were four eggs, all of which were productive, the young appearing in April. The nests observed here to this time have, in every instance, been in slight hollows of the ground, with a little grass or dead leaves in the bottom, for lining. To withdraw attention from one of these nests when containing young, the parent tumbled about as if wounded, thus feigning to a greater extent than the keeper had ever before witnessed in any species of bird; at the same time she gave utterance to a note distinct from those before mentioned; as expressed to me, "screeching with rage:"—when disturbed during incubation, they merely fluttered off the eggs, and alighted at a short distance. The young birds are said to be beautiful in the down, being mottled with black where their parents are so, and cream-coloured where the latter are brown. About the second week of June, a fourth brood was seen, of which the nest was not found.

In 1838, one nest, containing four eggs (the ordinary number), was observed in the park; the young appeared in April: by the middle of which month they have generally come out here.* Long after the general departure of the woodcocks for the north this year, the game-keeper saw what he believed to be five distinct brace of these birds in one portion of the park, and considered that they were more numerous than in any previous summer. The nests were not discovered as usual, in consequence of boys, by whom they were all found on former occasions, not having been employed in the young plantations. Daily throughout the year, the keeper now either sees or hears woodcocks

marked during the month of December 1848, that these birds had a regular line of flight, his garden being the place over which they flew, either singly or two in company. The time was at dusk, about half-past four o'clock, p. m. A number of shots were fired at them (though ineffectually) by his servant; but they, nevertheless, continued to take the same course daily.

* In the ninth volume of Loudon's 'Magazine of Natural History,' p. 543, it is stated of three nests found in a wood near Derby, that the young were hatched in the month of April. In vol. i. (Second Series) of the same work, it is remarked, in a notice of its breeding in Ross-shire, that the woodcock "hatches early, often at the latter end of March, but generally by the first week of April." On the 10th of the latter month, the writer of the communication to the Magazine, saw woodcocks sitting on their nests, one of which contained eggs.

without going out of his way to look after them; they fly very much about his cottage, situated in a beautiful open glade, and from near its door may be seen on wing every evening. I obtained all the preceding information when at Tollymore Park in August 1836, and June 1838. On the 28th of the latter month I visited the park in the hope of seeing some of these birds; but the evening was so fine and light that they did not commence flying until very late, and then darkness suddenly came on. At half-past nine o'clock the first were heard, when a pair swept past within about thirty yards, uttering the two successive calls, as above described. From this time, until half an hour had elapsed—when it was in vain to attempt seeing them—several single birds were heard: they gave utterance only to the other call, stated to resemble in sound the word *hisp* quickly uttered.

1843.—Since 1838, the number of woodcocks remaining to breed in Tollymore Park has been on the increase. In 1842, nine nests were observed, and in 1843 twenty-two! In the latter year, a brood of young birds was seen on the first of August, within thirty paces of the gamekeeper's cottage; three of them flew off when approached, but the fourth remained and was captured. Its plumage was complete except on the neck, where down appeared. When once "coming on" a brood of these birds, the keeper was made aware of their presence by the parent rising within about four feet of him with what he considered to be a young one in its claw, with which it flew about twenty yards into the wood. On alighting, such an outcry was kept up that he felt sure more young birds must be near. For some time he could not perceive them, they so much resembled the colour of the ground; but at length three were espied, within five feet of where he stood. When he first saw them, they squatted close to the ground with their bills resting on it; but the moment his eye was fixed on them, they rose to their feet, threw up their wings in the grotesque manner of an owl, and inclined their bodies awkwardly, first to one side and then to the other. He lifted one, examined its plumage, and set it down with the others, then walked away to a short distance, when they all rose and flew off, quite strong on the wing. The gamekeeper has particularly remarked that young woodcocks lie squatted on the ground until his eye rested full upon them, which invariably acted as a signal for them to "get on their feet."

So early as the 8th of March, 1845, the keeper remarked in a letter

to me :—" I see they are breeding with us this year again." A great number were bred that season, " some scores of young birds " having been observed by him. They seemed to be almost as plentiful as formerly in an ordinary winter. In 1846, there were not so many. In the last week of May that year, young birds as large as their parents were seen ; and, on the 30th of the month, a nest with eggs, quite fresh, was found. Until this date, fifteen broods were known to the keeper to have been brought out. A nest was observed within fourteen yards of the spot where one containing four large young birds was noticed in the preceding year ; and within two yards of which, another bird was at the same time raised from its nest with four eggs.

In the years 1847, 1848, and 1849, woodcocks bred abundantly in Tollymore Park, not less than thirty nests having been seen each year, but they have now become so commonplace as to be comparatively little noticed. These birds are considered by the keeper to breed twice from the circumstance of his observing them on their nests from February to July ; in the first week of which latter month this year (1849) he saw a nest containing but one fresh-laid egg. The sites of the nests are discovered by the manner in which " the hen flies about in easy circles, uttering her *whaap-whaap*, *hisp*, *hisp*, and pointing her head and eye towards the spot where the young rest on a soft bed of leaves, grass, or anything that may have been near the place selected." The keeper believed himself, as already noticed, to have witnessed the old hen carrying off her young when suddenly disturbed. Under the impression of his having been deceived in this matter, he several times followed hens apparently thus burthened to where they alighted, and saw them run off without any young bird being there. It is, he says, " the body behind the wings, the tail, legs, and feathers of the belly, that she droops down in a peculiar manner, that gives the appearance of a young bird being clutched up." He has several times been quite near to birds presenting the appearance here described.*

* Several instances of the parent carrying the young in its foot are brought together in Yarrell's 'British Birds' (vol. ii. p. 591). Mr. St. John remarks, that " regularly as the evening comes on, many woodcocks carry their young ones down to the soft feeding-grounds, and bring them back again to the shelter of the woods before daylight. * * * I have often seen them going down to the swamps in the evening, carrying their young with them. Indeed, it is quite evident that they must in most instances transport the newly-hatched birds in this manner, as their nests are generally placed in dry heathery woods, where the young would inevitably

The birds bred in this park are believed to remain constantly in or about it; no diminution of numbers, as in some of the Scottish woods, having been observed between the time that the young are able to migrate and the first flight arrives from the north of Europe. On the evening of the 19th of September (1849), when the letter containing these observations was written to me, several birds were seen, as they are daily at all times. In August or September they begin to alter their summer evening excursions, and take more to their winter habit of visiting the marshes. They become quite silent, and if not sprung in the woods, are seen only in the twilight or by night. The keeper has imagined that he knew the native birds when shot during the winter, by their being a little smaller in size, and lighter in colour, than the migratory ones;—an opinion in which two sportsmen whom he attended last season were disposed to coincide. For the first week of woodcock shooting, the birds were very plentiful and all of the light colour, while afterwards the larger and darker-coloured birds made their appearance.

On visiting Tollymore Park (accompanied by Mr. R. Ball), at the end of September 1849, I saw a nest formed chiefly of furze or whins of which there is a considerable quantity; the other component material being the twigs of larch-fir. This nest, on account of the singular substance of which it is composed, was carefully preserved, and with its four eggs is kept as a curiosity in Lord Roden's study. The site of a nest within twenty yards of the keeper's house was pointed out; it is placed on a gently sloping bank, from which some noble beech and other ornamental trees arise. The ground was hollowed out for this nest, and a large number of beech-leaves used in its construction; ivy trailed on the bank around, and woodbine arched itself lightly and gracefully over it. In such places are many of the nests; none having ever been found among brambles ("briars") or close cover of any kind. They are instead, in rather open places within the covers, and always on dry ground, the opposite of that on which the birds obtain their food. They are found at all kinds of elevation, from the base of

perish unless the old ones managed to carry them to some more favourable feeding-ground.

"Nor is the food of the woodcock of such a nature that it could be taken to the young from the swamps in any sufficient quantity. Neither could the old birds bring with it the moisture which is necessary for the subsistence of all birds of this kind. In fact they have no means of feeding their young except by carrying them to their food, for they cannot carry their food to them."—"Tour in Sutherlandshire," &c. vol. ii. p. 164-166.

the valley to the summit of the dry heathy mountain, whose sides being clothed with splendid woods, form the chief beauty of Tollymore Park.

The keeper has reckoned the "flushes" of woodcocks here in winter, and considered a hundred brace to be sprung. At other times, and on different occasions he is sure of having seen, in the course of a day, 150 brace:—in the year 1838, the most he could mention as having ever been observed within one day was eighty brace. He has sprung seven or eight birds together, like a covey of partridges, from beneath a single holly.

In the young plantations at Donard Lodge (the seat of the Earl of Annesley), adjoining those of Tollymore Park—the two combined occupying a nearly continuous extent of four miles on the mountain side, and in the latter park stretching across both sides of the valley—not less than a dozen nests of woodcocks were observed during each of the last three years. As the nests in these two demesnes have not been sought for, but have been met with merely by chance, many of them, doubtless, were never discovered. Hence we may perhaps fairly add eight to the minimum number—forty-two—observed during the last three years (when they had become so common as to receive little attention), and consider that they may have contained fifty nests. I have not seen a record of nearly so many being found in any locality in England or Scotland as have been in Tollymore Park alone.

The description of the habits of these birds about the period of incubation, as given by the gamekeeper here, strongly reminded me of the first good account I had read of the breeding of woodcocks. This referred to Ross-shire, and was communicated by Sir Francis Mackenzie to the Zoological Society of London.* The manner of flight is so different after the birds are paired, from that which the sportsman is accustomed to witness at other periods, that I am induced to call attention to the similarity of testimony in the two cases. "Than the flight of the woodcock before and after incubation, Sir F. Mackenzie states, that he knows nothing more rapid, as for an hour or two about dusk he (probably the male, though two have been seen pursuing each other) flies in large circles over the tops of the trees." To a sportsman at least, words could not better convey an idea of the rapidity of its flight than those of my informant, who, an experienced "shot," de-

* Proceedings of Zool. Society, 1832, Part II. p. 133.

scribes it to be such that he cannot "get his gun upon them,"—in other words, the velocity is so great, as to prevent his taking aim.

For the last century, woodcocks have been noticed as occasionally breeding in England; but the instances recorded were very few in number until of late years. Particular instances of their breeding in Scotland were published in 1832, and many subsequently.

In a communication made by Mr. Selby in 1837, to the 'Magazine of Zoology and Botany,' on "the woodcock breeding in Scotland," it is asked, "What reason is to be assigned for this change in their habits? Is it to be attributed to a change in our seasons, or are we to look for it in the great increase of woods or plantations so general over all the island, affording these birds additional and secure retreats, as well as an abundant and constant supply of food?" vol. i. p. 201. Sir Wm. Jardine (in 1842) attributes the apparently much-increased instances of the birds breeding in Great Britain to the great attention which has recently been paid to ornithology, and to such facts being recorded, as he cannot perceive any change in the country to induce the birds to remain more frequently now than formerly.*

In the county of Down, Ireland, however, they certainly have much increased, though gradually, since my attention was directed to the subject in 1836. This cannot, I conceive, be accounted for by either cause put hypothetically by Mr. Selby. There was always, as it appears to me, abundance of plantations in the three kingdoms suited to the nesting of the woodcock, and the change of seasons, or more equable climate of late years would render the country the more unlike what the bird had been accustomed to—the summer of northern and the winter of temperate Europe.

That their remaining to breed originated from wounded birds unable to undertake the vernal migration seems to me the most untenable of all reasons which have been assigned, inasmuch as the same cause existed at all times. Why should the number of wounded birds have been greater over the British Islands generally of late years than at any former period? Did our sportsmen become at once more numerous, and their aim less sure? Of what avail are all the "appliances and means" of modern "warfare," as the patent cartridge, patent wadding, and percussion caps, if more wounded and unbagged birds are left behind than formerly!

* 'Brit. Birds,' vol. iii. p. 171.

On a full consideration of this interesting question, I am of opinion that we cannot arrive at any satisfactory conclusion until we possess a knowledge of the changes which have taken place in the woodcock's former breeding-haunts.

Mr. Hewitson has remarked that :—"When wandering through those endless pine-woods [of Norway], it was a very rare occurrence to raise a woodcock during the day-time, although in the evening, towards sunset, and for hours afterwards, numbers of them were constantly flying to and fro over the trees of the forest, uttering a kind of chirping note."*

Mr. George Matthews, during his sporting excursion along the coast of Norway, in 1843, saw two only of these birds—in the month of August, at Bodo—both of which were shot. His notes state that the Norwegians seem to know little about woodcocks, and in some places will not eat them. They sometimes collect numerously on the south coast about Christiania at the beginning of the migratory season, but their appearance in large numbers is uncertain. One of his companions, when in Norway a few years previously, shot three or four in the island of Rodo, within the arctic circle, about June. In that month of 1843, another of his companions shot some young ones at a place called Hund, on the road between Trondjeim and Christiania. My late friend observed that, from what he heard, "they seemed to be much scattered over the whole of Scandinavia."

THE GREAT SNIPE.

Solitary Snipe.

Scolopax major, Linn.

Has occasionally been obtained in Ireland.

I HAVE not myself seen any example of this species which had been killed here; but have no doubt of its occasional occurrence in various parts of the country. A veteran and observant sportsman considers that it must have been this bird which he shot several times in the outskirts of Belfast more than half a century ago. He describes it as having been always solitary, and among

* Eggs, 'Brit. Birds,' p. 304.

saggans (the yellow flag, *Iris pseudacorus*), that the flight was peculiar, the bird being inclined to fly round the place from which it was sprung, and to alight again about the same spot; even after being fired at.* Since the fields were drained—nearly fifty years ago—and the “saggans,” of which there were some acres, extirpated, he has not met with one, nor did he, though shooting a great deal every season since that period until the last two or three years, see the species in other localities: he describes the birds when sprung as looking like small woodcocks in size. In the year 1831, a lady, well acquainted with our most critical species of birds, assured me that she had seen a great snipe which had been killed in the county of Meath. In the ‘Wild Sports of the West,’ the following passage appears, with reference to the island of Achil. “We crossed the bent-banks, occasionally knocking a rabbit over as we went along, and wheeled to the westward to skirt the base of Sleive More. We had not proceeded far, before an islander, who was herding cows, told us that there was a *crowour keogh beg*—a little woodcock—in the next ravine. We accordingly put a setter in, and were gratified with a steady point in the place the herdsman had intimated. The bird sprang, and was knocked over by my companion, when the little woodcock proved to be a double snipe. These birds are extremely scarce here, and a few couple only are seen during a whole season by persons most conversant in traversing the bogs,” p. 299, ed. 1838. When in Achil in June 1834, I particularly inquired of Lieut. Reynolds, R.N., of the Coast Guard Service—an ardent and indefatigable sportsman—respecting this snipe; but he had never seen one in the island. The bird was known to him from his having once or twice shot it in Wales.

A dog-breaker, who was in the habit of accompanying a relative of mine when snipe-shooting, told me of a “woodcock-snipe” which was killed by my friend in the season of 1834–35, in the county of Antrim, near Belfast: he described it as having been larger than the common species, and having the belly barred all over. It particularly attracted his attention as a bird which he had not

* I have occasionally remarked the common snipe to do the same.

before seen, though he had been present at the death of many hundred snipes in the north of Ireland. A snipe was shot near Belfast by a sporting friend, about the 1st of November, 1837, that from size and colour he at first sight thought to be a woodcock :—a few winters previously he had killed a similar bird. In May 1842, Lieut. Kempe, R.N.—of the Coast Guard Service—then stationed at Cushendun, describing the species admirably, assured me that he had shot three examples of it, one in England and two in the south of Ireland. Mr. R. Davis, jun., of Clonmel, who, like myself, has not met with Irish specimens of the bird, is of opinion that it has occurred in a few instances in his neighbourhood—four or five, in that number of years—and mentions what he believes to be this species, being called by sportsmen the *Solitary*, and the *Silent Snipe*. On February the 2nd, 1837, he remarked—“A friend of mine spent half a day, about a month since, in pursuit of one, but could not get a shot at it.”

T. W. Warren, Esq., of Dublin, informed me, on November the 17th, 1841, that the first he had seen of these snipes was then in course of being preserved by Mr. Glennon. It was shot a few days before in the county of Kildare. On my calling the attention of Mr. R. Ball to it, he replied, that he too considered the bird to be *Scolopax major*, that “it weighs eight ounces, is barred on the belly, and wants the lumbar plumes of sharp feathers possessed by the common and the jack snipe.” Through the same means, I heard of another of these birds, that was shot on the 6th of December, 1845, in the county of Leitrim, by an officer of the 32nd regiment, and sent in a fresh state to the taxidermist just named. The attention of the gentleman mentioned in the latter instance being called to this specimen, he believed it to be *S. major*, adding that :—“One foot was shot away, and the tarsus of the other so injured that measurement was out of the question; the wing from the carpal joint is rather more than $5\frac{1}{2}$ inches; the bill $2\frac{1}{2}$ inches; middle toe and nail $1\frac{3}{8}$ inches.”

In November 1836, Captain (now Major) T. Walker, of Belmont, Wexford, wrote to me respecting the occasional occurrence

of the solitary snipe in that county, where he had not, however, met with it since 1830 or 1831. Being further questioned, that gentleman replied, in July 1846 :—"The solitary snipe I have at different times shot here is much larger than the common snipe, bill shorter, plumage nearly alike, with the exception of the belly, which in the Common is white, but in the Solitary is speckled with grey and brown. It lies close, and when flushed makes no cry, flies steadily without twisting, and slower than the Common (probably from its fatness, and not being a shy bird), and pitches again, like the jack snipe, after a short flight of thirty or forty yards. I never heard a cry from it; but sportsmen abroad have told me it has one, not, however, resembling that of the common snipe. I believe that every year several come over, though not found by sportsmen who do not know where to look for them;—not in bogs, but in *long-grass* fields in marshy neighbourhoods. They frequent these abroad, and are called *meadow-snipe* (*wiesen-schnepfe*). They breed in the marshes of Hungary, and, being migratory, come to the marshy district between Laibach and Upper Laibach, long before any frost could influence their flight. They remain there not more than a fortnight, and, I know from sportsmen, are soon afterwards found in quantities in the Pontine Marshes. The 'double snipe' of the continent is the same as the bird I have killed in Ireland. In one winter, about fifteen years ago, solitary snipes were plentiful in the grassy lands of Hayestown, at the foot of the mountain of Forth, about four miles from Wexford. Every day I shot there I got three or four birds: since that time, the ground has been drained, and all kinds of snipe have quitted it; but I generally yet get a few elsewhere in the course of the winter's shooting in the county of Wexford."

Mr. G. Jackson, who has been living in the capacity of game-keeper in different parts of Ireland for nearly thirty years, never met with any but two birds which he considered to be the great snipe. He was then keeper to Lord Cloncurry, at Lyons (co. Kildare). The birds rose together from a field of wheat stubble near the Grand Canal, and not far from the town of Sallins

in October 1827, and were killed by him "right and left." They were noted at the time as larger than the common snipe, with the bill rather shorter; as flying more slow and heavily than that species, and with the tail spread like an open fan. They were taken away by the late Earl of Errol, who was on a visit at Lyons at the time, to be preserved. The great snipe is believed to have been shot in the county of Kerry.*

Mr. Lloyd, author of 'Field Sports in the North of Europe,' to whom this species is well known, never met with it in Ireland during his sporting tours, in the seasons from 1814 to 1822.†

There can be no doubt that many of the birds which have been noticed were the true *S. major*, which must be considered a rare visitant to Ireland. I never could meet with one among the thousands of snipes exposed for sale during the autumn and winter in Belfast.

Some of these birds visit England not uncommonly—perhaps annually—on their migration to or from the north of Europe to breed; but more especially the young when moving southward in autumn. There is no *positive* notice of their occurrence in Scotland in the works of Fleming, Jardine, or Macgillivray. Mr. St. John states that he once only met with the species in that country;—in Sutherlandshire.‡ The great snipe is mentioned as having appeared several times in September 1815, in marshy ground at the island of Sanday.§ As well remarked by Mr. Selby, "The immediate direction of their latitudinal flight is much to the east of the longitude of the British Islands." In Mr. Yarrell's 'History of British Birds' much interesting information on this species will be found.

* Mr. R. Chute.

† 'Sporting Review,' October 1847, p. 259.

‡ 'Wild Sports,' &c. p. 223.

§ Hist. Nat. Orcad. p. 66 (1848).

THE COMMON SNIPE.

Heather-bleater.

Scolopax gallinago, Linn.

Is, from the nature of the country, much more abundant in Ireland than in Great Britain; and is partially indigenous.

Migration.—It breeds at suitable localities in all parts of the island, without reference to altitude; equally in the low marshy tracts and in the bogs on the summits of lofty mountains. The numbers produced in this country, however, are but a mere fraction of the multitudes which inhabit the bogs throughout the autumn and winter. So early as the month of August, they sometimes appear from more northern latitudes, and are tempted to remain a few days before proceeding southward, which I am disposed to believe all that arrive at a very early period do. Circumstantial evidence in three years, at least, favoured this view. In the beginning of the month of August 1828, there was excessive rain, which inundated an extensive tract—a mile in length—of low-lying meadows near Belfast (well known as “the bog-meadows”), before they had been mown. Melancholy as was this prospect to the proprietor, it must have appeared to the snipe from on high “a land overflowing with milk and honey,” as a great body of these birds, presumed to have been passing over on their southward migration, alighted and took up their abode for several days. The numbers vastly exceeded anything of the kind before seen by sporting friends who went in pursuit of them as well as myself. Dogs were not required, for the birds admitted of a very close approach. Every step that we moved—and much of the promenade was knee-deep in water like the haunts of the snipe in the paddy or rice-grounds of India*—

* The bird of India is, however, generally now considered distinct from that of Europe. I have not myself had the opportunity of comparing them. The beautiful “Painted Snipe” of India, well known in museums, is stated by a friend, who has killed many of them, to be the easiest of all birds to shoot.

several birds were sprung, and yet it required some resolution to do much execution upon them, for no sooner was the gun about to be directed at the first bird that caught the eye, than, right and left, several others would screech off, and call attention from it, so that making choice of the one to fire at ended in a hurried shot, the result of which often was that all escaped. To ensure success we had soon "to screw" our resolution to firing at the first bird that sprang, and eventually many were killed: they proved to be in fair condition. On the 13th of August, 1833, a migratory flock was seen. On the 22nd or 23rd of August, 1836, a dog-breaker met with great numbers of snipes on a part of the mountain-top near Belfast, that from want of moisture is ill-suited to the species, and where I have never, even when in the most favourable state for them, seen more than a single bird: in this instance they were, I conceive, merely resting from their flight.

The following notes bear on this subject. In the 'Wild Sports of the West,' the author observes:—

"I have seen much of snipe-shooting in many parts of Ireland, but I could not have imagined that the number of these exquisite birds could be found within the same space that one particular marsh which bounds the rabbit-banks produced. Independently of a quantity of detached birds, several *wisps* sprang wildly, as they always do; and I have no doubt that this fen had been their temporary resting-place after their autumnal migration from the north. We were the more inclined to this opinion, from finding many of the birds we killed extremely lean; while others that sprang *singly* were in admirable condition. Achil is a natural resting-place for migratory birds: and hence I can well believe the accounts given by the islanders, of the immense numbers of woodcocks and snipes which are here found, in their transit from a high latitude to a more genial climate."—P. 298, edit. 1838.

The period of the year is not mentioned in connexion with the circumstance in the 'Wild Sports of the West;' but in Yarrell's 'British Birds' it is remarked:—

"The Rev. Richard Lubbock writes me from Norfolk, that these birds [snipes] breed there in considerable numbers, which, however,

fluctuate greatly in different years, and are never sufficient to account for the number which sometimes appear in August, in which month as many snipes may sometimes be killed as at any time of the year."—Vol. ii. p. 604.

Towards the month of October, the birds that remain with us arrive from the north.* They are said to winter in Tory Island, off Donegal, though not to breed there.† They are found indeed generally at that season, on petty islets around the coast.

Snipe-shooting.—Daily Flights.—The shooting of snipes, as such, is generally considered inferior sport to that of other birds which claim the sportsman's attention, but their abundance in Ireland greatly exceeding that of the others, is considered a kind of equivalent, and, accordingly, they are very eagerly sought after.

The "twisting" flight of the snipe, which generally proceeds against the wind, leads persons to believe that it is the most difficult of birds to shoot; but this is very much a matter of practice. A sportsman, accustomed to snipe-shooting, will kill as many of these birds at a certain number of shots as of any others;‡ indeed, I remember one who, although from practice a capital "snipe shot," on going, for the first time, in pursuit of partridges, could not hit one of them. Mr. Poole remarks his

* Mr. St. John has observed with respect to the month of October in Morayshire:—"Immediately on the retiring of a flood in the river [Findhorn], great numbers of snipes are seen on the mud and refuse left by the water, feeding busily. Where they come from it is difficult to say, as at this season, except on those occasions, we have no great abundance of these birds."* In Northumberland, according to Mr. Selby, they arrive in the greatest number early in November. The history of the snipe given by the latter author is full and admirable.

I may here remark (though rather out of place) that the observations of Mr. St. John would apply to Ireland throughout the later portion of autumn and the entire winter. Persons living in the neighbourhood of rivers and lakes know with certainty when and how long, according to the locality, they will obtain snipes after the land has been flooded. In some places the flood subsides so rapidly, that these birds will only be met with for one day, but in others, whence the water retires slowly and leaves a great extent of residuum, they may be found for upwards of a week.

† Mr. G. C. Hyndman.

‡ I have been told of thirty-two birds having been killed by a northern marquis at that number of successive shots.

* 'Tour in Sutherland,' &c., vol. ii. p. 8.

having heard that, when flushed by a dog alone, snipes seldom fly far; he verified it by his own observation, adding, that "they easily discriminate between the lesser and the greater tyrant, and are well aware of the powerlessness of a dog for injury, unless accompanied by his master."

Mr. Lloyd, who has shot much in different parts of the southern half (but it only) of Ireland, remarks:—

"I do not think I ever met with more than fifty or sixty couple [of snipe in the course of a day]. * * * With a good marker, a good dog, a knowledge of the country, and propitious weather, a man ought to kill some twenty couple in a day to his own gun; under favourable circumstances, that was about my average. On several occasions I have bagged from twenty-five to twenty-eight couple, and in one instance thirty-two couple; and this, be it remembered, independently of other varieties of game. A very small portion of the snipes that at various times I have shot at Ireland were jacks, probably not more than one in twenty." *

I have been assured that the late Captain Hungerford has shot on one day forty-nine, and on another, forty-nine and a half brace about Clonakilty, county Cork. An officer quartered about twenty years ago in the county of Longford, commonly bagged from thirty to thirty-five brace. A sportsman of my acquaintance has, with a friend, killed forty-four brace in the county of Antrim. Although the extent of cultivation and the populous nature of the country around Belfast render it unfavourable for snipes, the following returns of numbers killed by a relative, shooting at least once a week, within ten miles of the town, may be worth giving. In the seasons from 1835–42, the greatest numbers of these and jack snipes killed by him were seventeen brace twice, seventeen and a half and nineteen brace; during this time so many only as ten and ten and a half brace of the common snipe were obtained five times, eleven brace twice, twelve and twelve and a half brace each once, the remainder being jack snipes. This was the result of only a few hours' shooting, as a drive of some miles to and from the bogs had to be undertaken.

* 'Sporting Review,' October, 1847, p. 259.

The chief game-dealer in Belfast told me in the winter of 1848 that occasionally, after Christmas, from 90 to 100 couple of snipes are brought to him in a morning from the counties of Down and Antrim. He purchases them to any extent, and sends them chiefly to England, as they produce a higher price there than in Ireland. Mr. Yarrell informs me (1848) that Irish snipes rate lower in the London market than English, from their being less fat and clean in the skin;—this is scurfy, perhaps (he remarks), owing to the low temperature of the ground on which they feed. Many of the birds alluded to are doubtless taken in snares, which, little though we hear of them about Belfast, I have on different occasions detected within a few miles of the town.

I have myself had some experience in snipe-shooting, and can truly say, that of all our birds snipes seem to be the most sensible to the skye influences; or possibly what appears to us their sensibility may be prompted by their instinctive knowledge of that of the minute creatures on which they prey;—the successful pursuit of these may require the frequent change of ground. Bogs under similar circumstances of weather, at least to our senses, will exhibit their thirty or forty brace of snipes one day, and not more than three or four brace the next. The birds would seem to be almost ever on the move from one locality to another. At the dusk of every evening, too, they leave their more retired daily haunt chiefly to feed in localities where they would be disturbed during the day. At such times any little moist place invites them:—two low, excavated portions within the grounds of the Royal Academical Institution in the town of Belfast, were at one time (and may still be) nightly visited. We generally meet with them at the “witching hour” on flight from the higher to the lower grounds; but when I have been walking on the mountains in the autumnal evenings they have passed over my head on their way from the valley towards the mountain-top. We can hardly walk anywhere about the town just named in the autumnal or winter days, and sometimes even in those of summer, when becoming dusk, without hearing the call of the snipe on the way to its nightly quarters. It is an extremely interesting sight to witness

these birds coming in numbers to favourite night feeding-grounds, such as "the bog meadows" already mentioned. When stationed on the ditch-banks intersecting them awaiting "the flying" of wild-fowl—ducks, wigeon, teal, &c.,—one hears a continual concert kept up by snipes coming at the commencement of twilight from the higher grounds—their places of refuge for the day—and alighting all around, the call ceasing the moment they touch the earth. For an instant only in the twilight are they seen, and then with downward pointed bill, they have a most singular appearance, as they sometimes come falling apparently from the clouds closely around us. Notwithstanding their proximity, the flight being over, a perfect stillness reigns, until we fire a shot, which alarms them, and those very near us take wing. Should the moon "show forth her silver lining to the night," it is the signal for them to move about from one part of the meadows to another, calling all the while they are on flight. During moonlight, too, in particular, they feed much in some districts in stubble and other fields. When shore-shooting on moonlight nights, I have raised snipes from the edge of the flowing tide in Belfast Bay. The wild-fowl shooters state that during autumn and winter numbers of snipes disperse themselves to feed every evening, but more especially by moonlight, over the extensive banks of *Zostera* exposed by the retiring tide from either shore to the edge of the channel, along which also they may sometimes be observed feeding like ordinary shore-birds. One of my informants killed three at a shot on these banks by moonlight. They are not sought for here by shooters, but make known their presence by their peculiar cry when they rise on wing. Very rarely, a few remain during the day. About the little grassy pools on a low bank over which the tide always flows at extreme high water, these birds have frequently been noticed. From all the low-lying night feeding-grounds visited in the manner described, they commonly take their leave very early in the morning, a few lazy ones, however, remaining until molested, when they fly direct to their upland or retired haunts.

Food.—Manner of Feeding.—Moist localities, no matter where

situated, or whether of fresh or salt water, being equally attractive to the snipe, the nature of its food must be various, and not of one kind, as Sir Humphrey Davy believed that of the double snipe to be.* A sporting friend once found a full-grown horse-leech in a snipe shot on the 20th of August; a second instance of which, in mild weather, has also been made known to me. The contents of the stomach of seven of these birds, which I particularly examined, and all from different localities, were as follows:—of three shot in the month of January, two contained a few seeds, and the third was half-filled with soft vegetable matter:—two shot in March exhibited the remains of vegetable food which resembled *Conferva*:—of two killed in October, one contained a large worm, and two or three seeds of different kinds; the other, two insect larvæ (*Ascaris*-like in form). Fragments of stone, of which some were the size of small peas, were found in all, the last-noted one being filled with them.† It is a common saying in Ireland, that snipes are not good for the table until after the first frost of the season. Sir Humphrey Davy remarks: they “are usually fattest in frosty weather, which I believe is owing to this, that in such weather they haunt only warm springs, where worms are abundant, and they do not willingly quit these places, so that they have plenty of nourishment and rest, both circumstances favourable to fat. In wet open weather they are often obliged to make long flights, and their food is more distributed” (p. 334, second edition). This explanation is not, to my mind, satisfactory.

Of the snipes' manner of feeding when actively engaged, it is difficult to have ocular demonstration; but during frost I have frequently seen them at the edges of mill-races and oozy streams, where they were stationary—and when backed by snow, even conspicuous—with more than a third of the bill immersed, the

* ‘*Salmonia*,’ p. 22, second edit.

† The vegetable substances may have remained after worms and other soft animal food had been dissolved.

Sir H. Davy observes:—“In the stomach of the common snipe I have generally found earth-worms, and often seeds and rice [the allusion is to the continent] and gravel,” p. 123. He again mentions its feeding upon “almost every kind of worm or larva,” p. 333.

point being doubtless in the mud at the bottom. But once have I observed a snipe on foot busily engaged in feeding : this was in a dam that had been run dry, and into the soft ooze of which the bird drove his bill its full length, and, apparently, every time with success. Indeed, that the whole bill must be often thrust into the ground is evident even from an inspection of the dead birds in a game-dealer's shop, as we find them marked with mud close up to the eyes, far back as these are situated in the head. It is generally, too, quite hardened on the feathers. The difficulty of seeing snipes on the ground, commented on by Mr. Selby, is indeed remarkable. Among the herbage, I have never been able to detect them ; but have known one person of remarkably penetrating sight, who could distinguish them anywhere, and under whose direction my first snipe was killed. He distinctly saw it in a drain, and pointed out the spot ; but to my sight (though excellent for ordinary purposes) the bird was invisible. Relying on his correctness, I fired at the spot to which he pointed, when no bird rising to betoken that life had been there, I imagined he had been mistaken and made me fire at a stone. On going to the place, however, he lifted the poor snipe, which had in this manner been shot dead. Weld, in his 'Travels in North America,' states, that snipes (*Scol. Wilsoni*) are so abundant in some marshy places, that a person by simply firing at the ground may kill them. The one mentioned is the only instance of the kind that has come under my knowledge.*

Snipe in Breeding-season.—Its Notes.—The snipe breeds very early. On the Belfast mountains, an old sportsman has frequently found the nest containing the full complement of four eggs in the first week of March, and occasionally in the last week of February. About the 1st of March, 1848, snipes were heard bleating at Dromedaragh, and in another district of the county Antrim a nest was discovered on the 18th of the month, by a gentleman who was snipe-shooting, on that and the two pre-

* Since the above was put in type, I have been credibly informed of twenty-one snipes being killed at a shot by moonlight, at a well during hard frost near Middleton (Cork), by a person who knew them to frequent the place.

vious days; on each of which, several birds, on being sprung by the dog, soared high into the air and made the bleating noise peculiar to the breeding-season. The nest, exposed though it be, is not easily discovered by the uninitiated. Many years ago I accompanied a friend to the mountain bogs to look for snipes' nests, that the eggs might be added to his collection, when, after searching for a long time, and about to leave the last bog, one was discovered;—but only by my friend putting his foot in it, and crushing the whole of the four eggs! Thus ended the hopes of the poor snipe in that brood and, at the same time, our nesting expedition. A dog-breaker told me of his springing young snipes on the mountain on the 18th of April, 1832. It is extremely interesting to visit the breeding-haunts of this bird when the two notes peculiar to the season, in addition to the drumming or bleating, may be heard. For half an hour at a time I have listened to the almost incessant bleating, and if the birds be breeding to so late a period as I have heard it (the end of July), there is ample time for two broods in the year. With reference to the *two* different notes of the snipe in the breeding-season, it is perhaps necessary to explain that the piping note well observed to resemble the sound "peet" repeated,* and that which has been likened to the sound of the word "tinker, uttered in a sharp shrill tone,"† are meant:—the former, I have generally heard during the bird's *ascending* flight, and the latter chiefly from *the ground*. Late on a lovely summer evening (18th of June, 1843) I watched for a long time a snipe that was drumming, &c., and remarked that it was occasionally joined by another for a short period, the latter, believed to be the female, always retiring to a boggy part of the hill suited to its nest: the other never alighted. Whether this bird was high or low in the air, the

* Note to White's 'Selborne,' by the Hon. and Rev. Wm. Herbert, p. 167. Bennett's edit.

† The writer in Loudon's 'Magazine of Natural History,' vol. ii. p. 144, from whom this is borrowed (Mr. Yarrell writing under the initials H. V. D.), remarks that this call is uttered on the snipe's ascending flight, and Sir Wm. Jardine ('Brit. Birds,' vol. iii. p. 180) mentions its piping among the herbage.

drumming, as I had invariably before noticed, was only produced when a downward wheel was made ; it ceased the instant ascent again commenced. The flight of the snipe is singular and attractive when drumming is part of the performance ; the bird soars, makes a wheel down—like plover when fired at—and drums, then soars again ; occasionally takes a bold sweeping ring of noiseless flight, and then to the soaring and drumming again. This noise is considered to be produced solely by a peculiar action of the wings ;* but I should rather attribute it to the voice of the bird. I cannot imagine any motion of the wings to be heard so audibly at the distance of half a mile, as I have frequently heard this bleating note. The peculiar dive that the bird makes through the air when producing it (whence considered to be caused by the motion of the wings) may be essential for its utterance by the organs of voice. As may be imagined, the bleating of the snipe has obtained for the species additional names in various languages,† as “ heather-bleat ;” Gaelic and Irish words signifying “ air-goat,” or “ kid of the air ” (mennan aer) ;—in France “ chèvre volant ;” the celestial goat (*Capella cælestis*), too, it has been named.‡

The note—very shrill scream, as Pennant calls it—is different at other times, and well compared by Mr. Selby (p. 123) “to the word *chissick* lispingly pronounced.” This author correctly terms it the “alarm-cry,” but it is something more, for during the evening flight to the feeding-grounds, when the bird is quite unmolested, this call is commonly uttered.

Plumage, &c.—With reference to plumage, the following note was made “November 16th, 1833. On directing the attention

* Selby, vol. ii. p. 122. Herbert, *ibid.* Jardine, ‘Brit. Birds,’ vol. iii. p. 180. Macgillivray, ‘Manual Brit. Birds,’ vol. ii. p. 103.

† The following rhyme, founded on birds having more than one name, is common in some of the country parts of the north of Ireland:—

“The cuckoo and the gowk,
The lavrock and the lark,
The heather bleat, the mire snipe,
How many birds is that?”

‡ Rennie’s ‘Habits of Birds,’ p. 245.

of an ornithological friend to-day to the very dark colour of two snipes received from Coleraine, he remarked, that most probably they were birds bred in more northern countries, as he well recollected that all which were shot out of the multitudinous numbers which appeared in the 'bog meadows' in August, 1828, were peculiarly dark in plumage. It would be singular if we could thus distinguish a foreign from a native bred snipe."* Two "white snipes" killed near Belfast have come under the notice of a friend. In the winter of 1831-32, several crested snipes were shot in the bogs near the town just named by three of my sporting acquaintances, to the gun of one of whom two or three fell on the same day in the King's Moss. The crest of one which came under my inspection extended for nine lines from the lower portion of the entire back of the head in a horizontal manner. Close to the head only, the feathers were brown and black, all the rest being white: this crest arose from a warty protuberance. It is extraordinary that so many with crests should occur about the same time as I had not before, nor have I since met with any but a single individual (in Dec. 1841) having such an appendage. This specimen exhibited a row of feathers projecting in a drooping manner four lines from the lower part of the back of the head; the portion of them which projected beyond the ordinary plumage were of a white colour.† A snipe, larger than usual, and of a delicate cream-coloured white, with the wing-coverts of a very light brown, was shot near Cork, in Dec. 1846.‡ Mr. R. Chute remarks that he has "occasionally seen snipe in Kerry as yellow as a canary." Two birds of this species killed in Ireland, having five toes on each foot, have come under the notice of a correspondent.

* See remarks on the light colour of native-bred woodcocks at p. 254.

† Mr. Dillwyn mentions a variety of the woodcock being sent to him on the 29th of January, 1826, with a tuft of white feathers on the head.—'Fauna, &c., of Swansea,' p. 8.

‡ Mr. W. A. Hackett.

When shooting in Scotland,—in the counties of Ayr, Wigton, Dumfries, Perth, and Inverness, and in the island of Islay,—I have been surprised at the scarcity of snipes everywhere, as all persons accustomed to meet with them abundantly in Ireland must be. In beating a marsh which in the latter island would produce a score, often none at all, or only a solitary bird, would be sprung. This cannot, I presume, arise from such localities being less adapted to the species, but to the comparative infrequency of them over an extensive range of country. In some of the islands, according to Mr. Lloyd, snipes are occasionally plentiful, and in many parts of England snipe-shooting is still obtainable.* †

SABINE'S SNIPE.

Scolopax Sabini, Vigors.

Has several times been obtained; more frequently than in any other country.

THIS singular bird was discovered in Ireland; the original one, described by Mr. Vigors, having been shot in Queen's-county on the 21st of August, 1822. Captain Bonham, of the 10th Hussars, at the request of a mutual friend, favoured me with the following particulars of the second native specimen, and at the same time had the bird most kindly sent from Brighton to London for my inspection. He observed:—"I shot it at the end of November or beginning of December, 1827, about a mile from Garvagh, county of Londonderry, on the side of a high heathery hill rising from a large *flow*, or uncut turf-bog: common snipes were rising at the same place. The bird was tame, and did not squeak like

* Sporting Review, October 1847, p. 256.

† *January* 1849. Mr. P. Mackenzie, gamekeeper at Ardimersy, Islay, informs me that when acting in a similar capacity to Lord Londonderry some years ago, at Wynyard Park, Durham, he has, when partridge-shooting in the months of October, November, and December, and not looking particularly for snipes, often killed from thirteen to fifteen, and once twenty brace, in the country within seven miles of Stockton-on-Tees.

the generality of snipes, and at first, in consequence of its dark colour, I took it for a water-rail. Being rather too anxious, I fired three times before killing it: after each of the first two shots it pitched quite near again like the jack-snipe." * About March the 13th, 1838 (as communicated by me to the fifth volume of the 'Annals of Natural History') one of these rare birds was shot near Kinnegad, Westmeath, where it had been seen for three years, and occasionally fired at. The specimen was sent to Dublin, where in the ensuing month of May I saw it in the possession of Mr. Glennon, the well-known bird-preserver. Its measurements were,

	<i>Inch.</i>	<i>Line.</i>
Length (total)	11	3
—— of bill above	2	7
—— tarsus	1	3½
—— middle toe and nail	1	4
—— wing from carpus	5	3

In plumage it was quite similar to the individuals hitherto described. Mr. W. S. Wall, a Dublin bird-preserver, who saw this specimen, assured me that about nine years previously (then 1838), a similar bird shot in this country was, on account of its remarkable appearance, sent to him (in a fresh state) by the Rev. Sir Harcourt Lees, Bart., under the name of "black snipe." When "set up," it was presented by that baronet to the museum of the Royal Dublin Society, but within a few years was attacked by moths and destroyed. With reference to the species of the bird in question, I have full reliance on the accuracy of my informant.

The occurrence of a fifth specimen was made known to me by Thomas W. Warren, Esq., of Dublin, who on the 1st of February, 1844, mentioned his having that day seen (at Mr. Glennon's) a female bird which was recently shot (by Aquilla Dancer, Esq.)

* I took advantage of the bird being in London to exhibit it at a meeting of the Zoological Society, and read the above letter, which was printed in the 'Proceedings' for 1835 (p. 82). Mr. Yarrell having previously seen this *S. Sabini* when in the bird-preserver's hands, noticed it merely as "a third specimen" (it was the second *Irish* one) in the 'Magazine of Natural History' for 1830 (vol. iii. p. 29).

near Rocksborough, King's-county.* The same gentleman reported in January, 1846, that a Sabine snipe was shot (by Charles S. Ottley, Esq.) on the 17th of November, 1845, in a bog at Ballyconnell, county Cavan, where it had been observed during two years. It was stuffed by Mr. Glennon, who stated it to be the fifth one he had preserved.† In December that year (as I was informed also by Mr. Warren) Mr. Burton, of Clare, shot one on his property in that county. The specimen was some time afterwards brought to Dublin. The following notice of one of these birds from Mr. R. Davis, junr., of Clonmel, appeared in the 'Zoologist' for October 1846:—

"I have just received a specimen of Sabine's snipe; it was shot on the 31st of last month [August] in a bog near New Birmingham, about sixteen miles from this place, by J. Morton, Esq., of this town. It was in company with a common snipe, and rose with it; its cry was similar to that of the common, and but for this cry it would have escaped, being, on first rising, mistaken for a water-rail, and allowed to go a considerable distance. It appears to be a male bird, and was moulting. Yarrell says the tail consists of twelve feathers, and that two of the toes are united for a short distance; in this specimen, they are divided to the origin, and the tail now consists of thirteen feathers; some grains of shot passed through these, and probably cut away another feather. I have preserved the skin."

On the 11th of February, 1847, Mr. Gubbins, of Tralee, while in company with Dr. Chute, fowling, shot a Sabine snipe within a few miles of that town; it is now in the collection of the latter gentleman. A second specimen was killed on the same month in Kerry.‡

This last makes the tenth Sabine snipe killed in Ireland of which such record could be obtained as is given here. Not so many have been procured in England; and in Scotland none at

* It was noticed in a letter from another correspondent as shot on the "Good Island Bog, between Cloughjordan and Dunkerrin."

† This bird was presented by Mr. Ottley to Trinity College Museum, Dublin.

‡ Mr. R. Chute, March 1847.

all (Jard., Macg.). This bird is not known out of the British Islands, and there only as one of which a few individuals have fallen beneath the guns of snipe-shooters. Of its breeding-haunts, &c., we are wholly ignorant, so that the Sabine snipe is one of the greatest puzzles in Ornithology. For some time past I have not felt altogether satisfied respecting its distinctness as a species from the common snipe (*Scol. gallinago*) on account of the great similarity of the structural characters. A specimen kindly sent for my examination in March, 1849, from the museum of Trinity College, Dublin, by Mr. R. Ball, presented the following measurements, as compared with a common snipe:—

	Sabine snipe.		Comm. snipe.	
	<i>Inch.</i>	<i>Line.</i>	<i>Inch.</i>	<i>Line.</i>
Length total (of <i>stuffed</i> specimens, and hence uncertain)	10	8	11	3
— of bill above	2	9	2	10 $\frac{1}{2}$
— tarsus	1	3 $\frac{1}{2}$	1	4
— middle toe and nail	1	4	1	5
— wing from carpus	5	0	5	0

First quill feather of the Sabine snipe the longest in the wing: as it also was in that of two common snipes examined at the same time.

The tail feathers of *S. Sabini* are described to be twelve in number, but this bird had thirteen, having, of course, lost one, which would have made the number the same as in the *S. gallinago*. Mr. Davis, too, notices his bird as having thirteen tail feathers. The two exterior toes of *S. Sabini* are described to be “united to the base for a short distance;” but they were not in the least so in the specimen under consideration nor in that described by Mr. Davis. The tarsi of *S. Sabini* are described to be $\frac{3}{20}$ of an inch shorter than those of *S. gallinago*; but in the two individuals of which dimensions are here given, they are only nominally, or $\frac{1}{20}$ shorter. Adult common snipes could doubtless be found to vary $\frac{3}{20}$ of an inch in the length of their tarsi. When it is added that the tarsi are said to be stouter in *S. Sabini* than in *S. gallinago*, the whole of the structural differences pointed out in the original description of Mr. Vigors are included. In fresh birds only (which I have not seen) could this well be observed; the dried one which I examined in reference to this

character, did appear to have the tarsi in a very slight degree stouter than those of the *S. gallinago* with which it was compared. They are much darker in colour than those of the common snipe, but not more so than would be exhibited in equally dark-coloured varieties of that species. The tarsi and toes of a second specimen in Dublin University Museum entirely agree in form and colour with those of the individual already noticed, but further, it and a third example preserved there, are too imperfect for comparison. We must not be led astray by such changes as the taxidermist can effect by his manner of setting up birds. Some of the specimens of *S. Sabini* that I have seen, had evidently been stuffed to appear as like woodcocks as possible in the body, and also in the feathers of the tibiae being arranged so as almost to reach the tarsal joint.

If there be not sufficient *structural* characters to mark *S. Sabini* as a distinct species, we cannot on those of colour alone admit it to that rank. In colour, however, it is peculiar and constant, thus differing from the ordinary varieties of woodcocks, snipes, &c., that we occasionally see—hardly two individuals of which are exactly similar. Every specimen of *S. Sabini* that has occurred was coloured much alike, and was remarkable by “the total absence of white from its plumage, or of any of those lighter tints of ferruginous yellow which extend more or less in stripes along the head and back” of the other European snipes.

We know nothing positively of any difference in the habits, call, &c., of the *S. Sabini* from those of *S. gallinago*. On these points, the two sportsmen who have favoured us with their remarks on the individuals which they shot, report differently, though no doubt both correctly. The one tells us that his bird, which rose about the same time as some common snipes, did not “squeak” as the latter usually do when sprung, and that after being twice fired at, it pitched quite near again, like the jack snipe. The other rose in company with a common snipe, and uttered a similar cry, but for which it would have escaped, as its colour led the sportsman at first sight to believe it to be a water-rail. The former one was also, from its dark colour, supposed to be a water-rail when it sprang.

THE JACK SNIPE.

Scolopax gallinula, Linn.

Is common for nearly half the year in Ireland, from the end of autumn until late in spring.

JUDGING of the arrival of this bird in the neighbourhood of Belfast from notes kept for many years, the 1st of October is about the average date. The earliest were seen on the 20th of September* (1836), and the latest on the 21st of October (1833).†

From the returns of a relative's shooting every year from 1835 to 1842 inclusive—chiefly within ten miles of Belfast—it appears that he killed jack snipes each season until the last day upon which he shot, ending from the 20th to the 23rd of March, at which period there was no diminution or increase to their numbers from what he met with at mid-winter: on March 21st, 1836, three brace were killed; on March 23rd, 1838, four brace; and on March 23rd, 1836, the latter number, these being respectively the last shooting days of the season.‡ On the 8th of April, I once met with this bird near Belfast. The number of jack snipes compared with that of common snipes killed by my friend will be interesting both to the naturalist and sportsman. These returns must not be supposed as given to show the quantity of birds that can be obtained in Ireland, as the country shot over contains very

* Earlier than this it must be remarked there was no opportunity of the sportman's meeting with them; the 20th of September being the first day of partridge-shooting in Ireland, and that on which he commences his campaign in districts where there is no grouse-shooting.

† A friend shooting at Aberarder in the north of Inverness-shire, noted the first jack snipe to be seen on the 27th of September, in 1838, and about the same time in the following year. In the month of September 1842, which I myself spent there, the first appeared on the 26th, upon which day the bird probably arrived, as had it been in the locality on the preceding day, it could hardly have escaped notice. A single bird only was seen on each instance. Mr. St. John tells us he once "killed a jack snipe on the 16th of September [in Morayshire] which is far earlier than these birds are usually seen. * * * In no other year have I ever seen one before the 8th of October; even that is very early."—'Tour in Sutherland,' vol. i. p. 286.

‡ Of 21½ brace of snipe killed by a sportsman about Springmount, near Clough (Antrim) on the 16th, 17th, and 18th of March, 1848, 14 brace were jacks, being a larger proportion than he had ever before killed of them. The relative proportion of the two species seen was similar to that obtained.

few snipes comparatively with the more remote and unimproved districts. From the 21st of September, 1835, to the 21st of March, 1836, he bagged 183 brace of the common, and $43\frac{1}{2}$ of the jack snipe: the greatest number of the latter obtained in one day (Dec. 20th) was seven brace, at the same time with eight and a half brace of the common snipe, and one and a half brace of quails.* That he is no ordinary "shot" will be evident, when it is stated that on this day he missed only six birds. On the 8th of January and 5th of March, four brace of jacks were killed, together with eight brace of the common species, on the former, and nine brace on the latter day.

From September 20th, 1836, to March 20th, 1837, 216 brace of the common, and $61\frac{1}{2}$ of the jack snipe were bagged; in the shooting season of 1837-38, $112\frac{1}{2}$ brace of the former, and 26 of the latter; the following season $118\frac{1}{2}$ brace of the one, and 36 of the other; the next $149\frac{1}{2}$ and $39\frac{1}{2}$ brace; from September 1840 to March 1841, 154 and 23 brace; September 1841 to March 1842, 105 and 72 brace. On several days of this last season the number of 'jacks' seen killed exceeded that of the common species;† thus on Nov. 9th were six brace of jacks to three and a half common; Nov. 26th, eight brace to six; Nov. 30th, ten to seven and a half; Jan. 14th, seven to four; Jan. 21st, eight to six; Feb. 14th, twelve to seven.

To judge from these respective numbers, taken altogether, jack snipes would seem to be in the proportion of about one-fourth to the common species—a conclusion to which I had before come, and which has also been given in the 'Wild Sports of the West.'‡ A little allowance should perhaps be made for the comparative accessibility of the jack, which, as has been well remarked to me, often "waits to be killed, while the common will not let one within

* The proportion on the 12th of January, 1832, when my friend and I shot together in the Flush bogs, was very different; about thirty-five brace of snipe and but one and a half of jack snipe having been met with.

† The gamekeeper at Tollymore Park, county Down, remarked to me in September 1836, but without allusion to any particular season, that in a day's shooting about there he sometimes meets with more jacks than common snipes.

‡ Letter 42, p. 312, edit. 1843.

shot." The jack snipe differs from almost all other birds in having greatly increased in numbers of late years in the north of Ireland. An old sportsman assures me that in his early days it was a rarity, and that not more than one would be met with in the course of six or seven days' snipe-shooting.

In the winter of 1831-32, these birds were particularly numerous in the north of Ireland. Although the species does not, like the common snipe, habitually change its quarters, it occasionally does so during the period of its stay, as I have known the same bogs to be equally well hunted by the same dogs, and when there was equally good scenting, produce double the number one day that they would do the next. I have seen four and a half brace killed (Dec. 15th, 1834) on ground, upon which not a bird could be found two days before, though a superior scenting day to the other.

Major Walker, of Belmont, near Wexford, states that the jack snipe arrives there in autumn, about a week before the woodcock,* and that in the mountain of Forth both species gather in numbers before taking their departure northward in the spring. I never heard of the jack snipe thus congregating elsewhere.

With respect to the breeding of this bird in Ireland, Mr. R. Ball has met with it in the Dublin mountains at midsummer; and a friend of his once shot several individuals there early in August. Different persons have told me (without supplying proof) of its breeding in certain localities; but the dunlin has often been mistaken for it on the moors in the breeding-season. On the following testimony of Mr. G. Jackson, gamekeeper, (communicated in May 1849,) I however feel certain of its having bred:—"I have known some few instances of the jack snipe breeding in this country. In the year 1834 I found a nest containing four eggs and the old bird sitting on them, in a large swampy bog, about three miles from the town of Ballyhannis (co. Mayo), the property of Lord Dillon. The following year I found two young birds

* Sir Humphrey Davy remarks in the notes to 'Sahnonia,' that in the south of Illyria, the jack snipe is always later in its passage than the double snipe or the woodcock.

near the village of Kilkelly in the same county, and also the property of that nobleman. The old bird was first seen fluttering about before the pointers to decoy them from the young. I have found them, I think, in two or three other instances, but cannot fix the time: the above I have noted in a diary I am in the habit of keeping of any remarkable event." It was believed until the last few years that the jack snipe did not breed in any part of Great Britain, in the Orkney or Shetland Islands, but two or three instances are said recently to have occurred.* I have not, however, met with any statement so satisfactory on the subject as the last here given.

Mr. G. Matthews, during his tour in Norway, observed snipes and jack snipes at all places as he moved northward. On the 19th or 20th of August, 1842, he shot some young jacks at Alten. When returning down coast in autumn, the common snipe was not met with, though the jack was, being often found on the small islands seaward, when the frost was not so hard as on the mainland. He shot some of these in September and October, on the island of Løppen.

The jack snipe is generally said by authors to be solitary, but it is commonly as well as correctly remarked in Ireland, that at all times where you find one, a second will not be far distant; although a "wisp" or small flock of common snipes may occasionally be seen, I have never heard of the other so occurring.

On January 28th, 1837, when passing a shop in Belfast where a number of jack snipes were exposed for sale, I was attracted by one with flesh-coloured legs and toes, and on inspection of the whole lot, found the legs varying from the ordinary greenish-grey to a decided flesh-colour: those exhibiting the latter were supposed to be the young of the year—in other respects the birds seemed alike, but the plumage had received too rough usage to be properly examined.

I do not find sufficient data with respect to the jack snipe in England and Scotland, to enable a proper comparison to be insti-

* Yarr. 'Brit. Birds,' vol. iii. p. 36. 2nd edit. 'Zoologist,' June 1849, p. 2456.

tuted respecting the relative numbers in the eastern and western island. My impression, however, is, that not at all the same disparity exists that does in the case of the common snipe;—that there is a much greater similarity in the numbers of jack snipe in the two islands, than there is in that of the *Scolopax gallinago*.

THE BROAD-BILLED SANDPIPER.

Tringa platyrhynca, Temm.

Numenius pygmaeus, Lath.

Has been once obtained.

To the following notice of its occurrence which I published in the 'Annals of Natural History' for 1845 (vol. xv. p. 309) I can only now add that a second specimen has since been procured in England; at Shoreham, Sussex, in the end of October 1845.*

Of the broad-billed sandpiper only one specimen is recorded as met with in Great Britain. It was noticed by Mr. Hoy in the first volume of Charlesworth's 'Magazine of Natural History' as having been "shot on the 25th of May 1836, on the muddy flats of Breydon Broad, Norfolk, in company with some dunlins and ring plover." In a locality of a similar nature—the oozy banks of Belfast Bay—a *Tringa platyrhyncha* was killed on the 4th of October 1844, with eleven golden plover and seven or eight dunlins at the same shot from a swivel-gun.

It is a male bird, and larger than the English specimen, but of about equal size with that described by Temminck. The following are its measurements†:—

	Inch.	Line.
Length (stuffed specimen)	7	0
— of wing from carpus to end of quills	4	3½
— of tarsus	0	11
— of middle toe and nail	0	10

* Mr. W. Borrer, Jun., in 'Zoologist,' vol. iv. p. 1394.

† The taxidermist noted the specimen before being skinned to be in length 6½ inches, breadth 13 inches; weight 1 oz. 4½ drachms.

	<i>Inch.</i>	<i>Line.</i>
Length of hind toe and nail	0	3
— of bill from forehead to point	1	3 $\frac{3}{4}$
Breadth of bill at base (now dried up)	0	2 $\frac{1}{2}$
Height of bill from base of upper to that of lower mandible	0	4
Tibia bare of feathers for about	0	4

Temminck's description (vol. ii. p. 616, 2nd edit.) of the plumage of the young bird before its first moult and of the nuptial garb show singularly little difference in a species belonging to this family, and Mr. Yarrell, having both the old bird in its breeding plumage and the young of the year before him, remarks that "the young bird so closely resembles the parent in its plumage at this season that it is unnecessary to describe it." My specimen agrees with the descriptions of these authors, excepting in what the ornithologist will be prepared to expect of a bird killed in the month of October—that the rufous tints throughout the plumage (margining the feathers, &c.) have all but disappeared, and are replaced by white. The winter plumage I have not seen described, but fortunately the presence of a few winter feathers on the back and wings of the present specimen sufficiently indicate that a change from black to grey, analogous to the seasonal change which takes place in the dunlin, likewise occurs in this species. The hue of these feathers, however, resembles more the pretty grey colour of the phalarope than the pale brownish grey of the dunlin—or purre, as it has been termed in winter plumage.

The broad bill and the peculiar marking of the head are the most obvious distinctive characters of this species. The dimensions of the bill have already been given: the plumage of the head may be thus described—from base of upper mandible to top of head, a narrow blackish-brown band, which broadens towards the hinder part of the head; on either side of this from the bill to the upper part of the eye, and continued over it, is a white streak, bounded by a dark brown band, which reaches from the side of the bill to the eye; throat white.

This is a very interesting species to the ornithologist, from the circumstance of its presenting the characters of different genera. Its general aspect—body plumage, delicate tarsi and feet,—is that of a *Tringa*, but in the form of the head, breadth between the eyes and broad base of bill we are reminded of the genus *Scolopax*, or true snipes, as we likewise are in the brown and white banding of the head, in which latter respect it likewise resembles the whimbrel (*Numenius*

phæopus). The very small rudimentary membrane between the base of the middle and outer toe, mentioned by Temminck as the chief character on which it has been raised to the rank of a genus by MM. Koch and Naumann,* is a most trivial distinction, it being in the least degree only more developed than in the *Tringa variabilis* and *T. subarquata*. Except in the head and bill, the whole bird is in form and plumage an ordinary-looking *Tringa*.

In the continental countries south of our latitude in which this species has been met with, it is considered very rare, nor was it known to be otherwise in the north of Europe until Mr. Dann lately visited Norway and Lapland for the purpose of studying the birds which frequent those countries in the breeding-season. In some places he found this *Tringa* to be by no means uncommon, and to Mr. Yarrell's beautiful work on 'British Birds' (vol. ii. p. 638) he contributed a full and admirable account of its habits, which were before unknown:—the figure of the bird in that work is most characteristic. Temminck mentions specimens having been sent from Borneo, Sumatra, and Timor.

THE PIGMY CURLEW.

Curlew Sandpiper.

Tringa subarquata, Temm.

Scolopax „ Gmel.

Is a regular autumnal migrant to the north of Ireland;—where in winter it is of very rare occurrence.

THIS gracefully-formed species is characterized in the latest works of authority as a "rare visitant" to Great Britain. Notes connected with it in Belfast Bay for above twenty-five years are before me. From these it appears, as with the *Grallatores* generally, that September is its favourite month in that locality. The earliest arrival noted is the 25th of August: before the end of September its departure is occasionally taken, and it rarely remains until the end of October.

* See 'Wirbelthiere Europas,' p. 77.

The first pigmy curlew on record, as noticed on our coast, was shot in October 1820, and came into the possession of Mr. John Montgomery of Belfast, then studying and forming a collection of native birds. The description of Montagu enabled him at once to determine its species. On the 3rd of September of the following year, another, which was alone, was shot by the gentleman already named near Conswater: and in the year 1822, the species again appeared in the bay on the 31st of August, upon which day and the 2nd of September, eleven* individuals were killed. These were noted by Mr. Montgomery to be "as described by Montagu, only more ferruginous on the edge of the back feathers and scapulars: in some, the breast was quite ferruginous."† In the month of September that year, one fell to my own gun at Holywood warren: in which locality I shot single birds in the same month of the two following years, one only appearing on each occasion. Their dimensions (though little exceeding those of their congener and close ally, the dunlin) made known their species at a glance in every instance. The pigmy curlew as it appears on the shore is a graceful, pretty-looking bird, and particularly interesting from presenting so pleasing a miniature of the great curlew. To the shore-shooters it soon became known, and an old man named Adams, who lived at Conswater Point, and spent his time between shoe-making and shooting, could single one out from a flock of dunlins at the distance of from thirty to forty yards. He procured several of them in this manner, knowing that they could readily be disposed of, although their associate dunlins, even when in large flocks, were not considered worth a charge of powder and shot. I have often since known the pigmy curlew to be killed in company with those birds; occasionally with them and ring dotterels, once with those

* I have since known this number to be killed in one day.

† On this subject I have made the following notes:—*September 12, 1836.*—Of seven recent specimens inspected, three were in adult; four in immature plumage. *September 11, 1841.*—One obtained, the back of which presents a beautiful marbled appearance, from a mixture of the summer and winter dress. Specimens weighed by Dr. J. D. Marshall, varied from $1\frac{1}{2}$ to $2\frac{1}{4}$ ounces. On looking several times to the stomachs of these birds, I have found only gravel and sand.

two species and godwits; in a single instance with redshanks and knots.

The numbers vary much in different years. In 1838 they were remarkably scarce; an intelligent shooter, always on the look-out, observing them but twice: one on the 3rd of September, and none again until the 23rd of October, when four appeared. In 1845, one only was killed; a few others were heard during the last week of August that year. In 1846, but two were seen until the 10th of October, on which day one was killed; the other had been procured on the 26th of September. In the autumn of 1837 they were more common than usual in the bay, and numbers were shot:* a flock of about twenty birds was once seen, and out of a party of eight, six were killed at one discharge. My informant (who has supplied me with many specimens) distinguishes this species from the dunlin when on the ground, by its superior size;—in flight, from the lower part of the back being white, or by its call, which is very different from that of its congener, and is said more to resemble that of the turnstone than of other shore birds. In 1839 they were more plentiful than ever before known, and arrived before the ordinary time, a couple having been shot on the 2nd of September. On the 7th of that month a flock of from thirty to forty appeared, and they increased until the 21st, when not less than a hundred were seen in company with a large body of dunlins, though generally when a number are together, they do not associate with other species: occasionally about fifty or sixty would rise together from one extremity of the flock, and after flying about for a short time would alight with the others. The noise produced by their calls, especially when on wing, was very great, and described to me as a “kind of chatter,” most unlike the note of the dunlin. This large body subsequently proved to have been collected together for migration, as they took their departure on that day from the

* On the English shores, also, they would seem to have been more common than usual at this time, as Mr. Yarrell remarks that “more than twenty were exposed for sale on the same day in Leadenhall Market, London, in September 1837.”—‘*Brit. Birds*,’ vol. ii. p. 627.

bay, and not one was seen again during the season. The *Grallatores* generally were particularly abundant in Belfast Bay during the autumn of 1839. In 1840, again, pigmy curlews were plentiful, and appeared so early as the 25th of August: their numbers increased until the 7th of September, and then they nearly all left the bay:—an early arrival is generally followed by an early departure. In 1843, flocks consisting of about a dozen birds were observed, from the 1st to the 18th of September, when I was informed of the circumstance. They usually keep to the shores of the bay, but in September and October 1836, they frequented the river Lagan (within flow of the tide at high water) in flocks; on the 6th of the latter month, I observed nine in company, busily feeding at the edge of the river, at Ormeau Bridge: in the following year, also, they frequented the tidal portion of that river.

In reference to the appearance of this bird in spring, I have but one note, which, not being communicated until some years after the occurrence, should not perhaps be implicitly relied on. It relates to four individuals being killed at this period of the year, from a flock of thirty to forty at the Lagan.

In the year 1831, I was shown a drawing of one of these birds, which had been shot in company with ring dotterels at Clontarf, Dublin Bay: subsequently eleven, obtained there about October 1836, were submitted to my examination, and several more were killed on the 19th or 21st of December that year. On the 3rd of November, 1837, Mr. H. H. Dombrain shot one from a very small flock at Lurgan Green, on the coast of Louth. In July 1844, one was observed on the shore near Clifden (Galway), by the Rev. George Robinson. This species has occasionally been seen in large numbers in Cork Harbour, by Wm. Crawford, Esq. On the 29th of October, 1847, he killed, at a shot with his large strand-gun, sixty of them, together with ten dunlins. On the shores only of Antrim, Down, Louth, Dublin, Cork, and Galway, I have positively known this bird to occur; but there can be no doubt that it annually visits all suitable places along the range of at least our eastern and southern coast. It is interesting to perceive that at the next place noticed, southward of Belfast

Bay, it was obtained after the species leaves that locality—in November—and again at the more southern, Dublin Bay, that it was shot in the following month—December—when it is not with us. The bird would thus seem to be in no haste on its migration southwards.

For some years after I had ascertained that the pigmy curlew is a regular annual visitant to Ireland, it was considered of very rare and irregular occurrence in Great Britain; but the increased attention since bestowed on ornithology has shown that the bird is much more frequent on the shores of Scotland and England than had been previously imagined.

Temminck states that the species winters in Sardinia, where it is very abundant, and leaves that island in May ('Man. d'Orn. Eur.,' part iv. p. 397). It has a wide geographical range, and is found extensively over the three continents of the Eastern hemisphere and in North America.

THE DUNLIN OR PURRE.

Sandlark of the Shore.*

Tringa variabilis, Meyer.

„ *cinclus* and *alpina*, Linn.

Is the most abundant of the *Grallatores* around the coast; but a few only, comparatively to their numbers, breed in Ireland.

THE remark by a correspondent, that "on the muddy flats of the River Lee, between Cork and Cove, countless flocks may be seen," will apply to numerous similar localities on each side of the island.

Habits in Belfast Bay.

This bay, with its extensive oozy banks uncovered by the retiring tide, is a favourite abode of the dunlin. So soon as the

* *Totanus hypoleucos* is commonly called *Fresh-water* Sandlark.

young can wing their way from their breeding-haunts, they come hither, and are then most easily approached. I have noted their arrival so early as the 30th of June (1842), when about a dozen appeared. The numbers generally increase rapidly, so that in one or two weeks after the first arrival they are plentiful on the shores. In 1840 they came very early, a large flock having been seen on the 3rd of July, and not less than 200 together on the 5th: the fine spring of that year probably induced them to retire northward earlier than usual. In 1838, great numbers first appeared on the 5th of July:—on the preceding evening an observant person, who was on board a vessel in the harbour, heard the call of the species at so great a height in the air, that he could not see the birds, but immediately afterwards a large flock came in view, and descended from a great elevation almost in a direct line to the beach—doubtless having just arrived on migration from their breeding quarters. In the following year, dunlins were remarkably late, not being observed, at least on favourite banks a mile in length, until the 30th of July; but then they appeared all at once in multitudes. Towards the end of July they have usually arrived in immense flocks, consisting chiefly of young birds of the year. That the majority does not always consist of individuals of that age, is, however, shown in the following note by J. R. Garrett, Esq.

“ July 26 and 27, 1848.—I have procured twenty-seven dunlins, shot during these two days; all old birds except six. There were three or four flocks of them on the Kinnegar, where they appear just to have arrived from their breeding-places. During the summer, I observed a few dunlins in the bay almost daily. Scarcely two of the twenty-one adult specimens were alike in plumage.”

At the end of July, I have remarked that every individual of immense flocks seemed, after alighting, from attitude, &c., to be giving forth its note as in spring, thus rendering the whole ooze musical. Although it never occurred to myself to designate the dunlin a song-bird, the best observers of the species in this locality consider that it should be so termed. Their statement

is:—that they hear its song in spring and summer, chiefly in May; that it is uttered by solitary birds as well as by those in flocks, and particularly immediately after their alighting on the ground from a flight. After giving forth their notes the birds disperse in search of food, running quickly in all directions, and repeating them again as they proceed. They sing most, early in the morning, for a few hours after sunrise.

Through the autumn and winter dunlins remain in the bay, unless when greatly persecuted, and then, like wigeon at the latter season, they leave it in the very early morning for Strangford Lough. When much disturbed through the day, about the time of high water, but little choice of a safe resting-place is afforded them, and they take this flight; yet, unlike the wigeon, whose high or low course through the air is regulated by the wind, they always rise high into the air before starting on their eastward direction, as if it were their aim to reach at once an elevation that will carry them over the intervening chain of hills. During rain, or when the wind blows strong from the east or south-east—against them—no annoyance will induce them to take this flight. In spring, the favourite resort of the congregated multitudes at high water, is to fields adjacent to the shore, which have been ploughed or harrowed, or are slightly braided with grain.

Dunlins were considered remarkably numerous in the autumn and winter of 1836, but in some later years they became much more so. On the 1st of December that year, I observed for a long time a great flock on wing, consisting of not less than 2,000 birds: this body, as usual, divided into two or three flocks, which alighted separately, but soon again without being molested rose into the air, when all again joined and went through the most graceful and beautiful evolutions. Various notes on the appearances presented by these birds on wing are before me, some of which shall be given, together with an indication of the greatest numbers seen during the years that they were most abundant. When immense flocks divide, fly right and left, and shoot into single strings, they strike upon the eye, while the sun shines upon them, and the dark banks of the bay serve as background,

like silver lines, occasionally of great length. A flock flying for a great distance just above the margin of the flowing tide, has strongly resembled, from their white plumage being displayed, a single wave sweeping rapidly onwards. *March* 10, 1840.—I was particularly attracted by the beauty of a large flock, one moment shooting out in the form of a cornucopia, the next gathered into a circle; one instant almost dazzling by their extreme brightness, the next dark in hue, and again, on the turn of the wing, exhibiting both light and darkness. When the back or breast is turned towards the spectator, every bird is individualized or distinctly marked; but when they sweep so as to show only the line of the back, they are almost invisible.

January 27, 1847.—Within the railway embankment opposite “the Grove,” I saw a flock of not less than 2,500 dunlins, and about 300 yards from them another of about 1,500. The larger body rising into the air and going through their brilliant evolutions, attracted every one on the adjacent highway; most of the people standing still in admiration of them. Descending from on wing, they all swept down in the same direction, and covered an extent of bank in such a manner as to remind me of grain thrown from the hands of the sower until it reaches the ground and is scattered along its surface. Every bird of the multitude, on alighting, moved at the same moderate pace, between walking and running, about equidistant from each other, and their heads being all similarly elevated they had a most formal and singular appearance. All, too, were, as usual, when thus congregated at any season (according to my observation), uttering their notes, which sounded most pleasingly musical. The voices of a host of dunlins occasionally gives as good an illustration of multitudinous sound as I can well imagine. *December* 24, 1840.—After the tide had ebbed for a considerable way I saw more dunlins close to the road before Fort William, than I had ever before observed in so small a space. There could not have been less than 5,000—as many as 3,000 were in a dense flock, busily feeding and keeping up a thrilling concert, like grey linnets when congregated previous to roosting—the others were somewhat more scattered. A few days afterwards,

a friend being out shooting early in the morning on the Down shore of the bay, saw a flock of several thousands. He described their appearance, as the sun rose, to have been one of the most beautiful sights he ever witnessed. The great body first appeared glancing in the sun; then it broke up into a dozen flocks, which rose and fell in the air like molten silver, or, as his companion observed, like showers of new shillings—a most apt image! One of the finest effects is when the background is so dark that the birds are only seen in silvery whiteness, flashing their under plumage upon us. The uncertainty as to where they may next appear—like that of lightning from an extensive mass of thunder-cloud—adds much to the effect. Only for a space

“Brief as the lightning in the collied night”

can they be observed under such circumstances.

From seventy to a hundred dunlins have often been obtained from one discharge of a shoulder-gun; but the swivel-guns used of late years in wild-fowl shooting produce terrible devastation among them. They are generally fired at on the ground; about 150, however, have been brought down from a flock on wing. On the ground about 200, in addition to a few redshanks, have twice been slain; but on the 16th of October, 1843, 216 were picked up after one discharge, and on the 9th of December, 1845, upwards of 300. In one of the above instances (Nov. 10), several of the wounded were borne off by grey crows, before the shooter could reach the spot: such is a common practice of the crows, of which numbers are always at the sea-side.*

Dunlins and ring-dotterels associate much together at all times on the shore, but the latter is a much less numerous species.

* This is more fully noticed under Grey Crow, in the 1st volume of this work, p. 313:—the pursuit of the dunlin by the peregrine falcon, merlin, and sparrow-hawk will be found respectively under pp. 35, 53, and 75 of that volume.

Wilson, in his ‘American Ornithology’ (Jardine’s edit. vol. ii. p. 331), remarks, on similar occasions to the above, that “while crowds of these victims are fluttering along the sand, the small pigeon-hawk, constrained by necessity, ventures to make a sweep among the dead in presence of the proprietor, but as suddenly pays for his temerity with his life.” From Wilson’s remarks, dunlins would seem to be as common on the shores of the United States as with us, but Audubon writes as if he had never met with them in such numbers.

When an opportunity presents itself, a little difference may, however, be observed in their haunts. While the banks are covered at high water, the ring-dotterels occupy a higher stratum than the other, preferring the dry gravel, and the dunlins keep near the water's edge: as the banks become exposed by the ebb, the latter are busily engaged feeding, while the ring-dotterels, motionless as statues, still maintain their "high position."

Until the beginning of April, dunlins continue in multitudes in the bay, but then commence taking their departure northward to breed; at the end of that month or the beginning of May, they again appear in great numbers, consisting, as I believe, of birds which, having spent the winter farther to the south, come hither on migration northwards. They occasionally remain congregated when the season is far advanced—even until the end of May, which the whimbrels also do. After the great body has departed, the shores of the bay may sometimes be traversed in vain for even a solitary bird, or at most some poor "pensioner," who has lost a leg, or been otherwise wounded, may be seen.

The dunlin keeps generally to the sea-side in the north-east of Ireland, where on the oozy banks left bare by the tide (in Larne, Belfast, and Strangford Loughs) food is at all times abundant.* It is a regular night-feeding bird, in darkness, as well as by moonlight. It occasionally frequents the river Lagan so far as the tide flows. When at Toome and Maghery, on the borders of Lough Neagh, at the end of September, I have observed small flocks, and have no doubt the species is constantly about this lake, except in the breeding-season. Birds believed to be dunlins have been seen by the Rev. T. Knox in summer on the shores of Lough Derg (an expansion of the Shannon);—in the neighbourhood of which they had not improbably been bred.

* The contents of a few stomachs of birds killed at various times were minute univalve *Mollusca*—the small *Littorina*, *Rissoa*, &c. Having remarked that a particular species of larva constitutes a great portion of the food of the dunlin and others of the smaller *Grallatores* which feed on the *Zostera*-banks of Belfast Bay, I submitted some obtained in July to the examination of A. H. Haliday, Esq., who pronounced them to be "the larvæ of a *Chironomus*, perhaps *C. plumosus*."

At mid-winter the dunlin has been shot at a small pond in the county of Wexford, several miles inland from the sea.* Birds of various species wounded at the sea-side often fly inland.

Breeding-haunts.†—A few pairs were annually seen by a veteran sportsman when hunting late in the season about the Brown Moss, seven or eight miles from Belfast, but drainage and other agricultural improvements have long since driven them from the district. At Dromedaragh, on the Six-mile Water, a relative shot one of these birds on the 14th of May, 1832, when the gamekeeper who accompanied him stated that he knew the species well as one of the two kinds of “sand lavrock” which come to the river at that season; the other alluded to being the *Totanus hypoleucos*, of which two specimens were procured the same day. When I visited the great deer-park, Glenarm, on the 10th of June, 1834, the circumstance of a bird of the latter species having flown from the river, suggested inquiry from the gamekeeper respecting the dunlin. He said that “a smaller kind” breeds in the adjacent bogs, adding, that it is the same species which frequents the sea-shore in flocks during winter. In the month of August that year a flock of about thirty was seen by an ornithological friend a few miles to the northward of the last-named place, on the mountain above Glenariff, two miles from the sea: they were in company with golden plover, and most probably were all indigenous birds bred in that quarter. A young bird, in the down, shot on the banks of the river Maine, has come under my notice. These localities are all in the county of Antrim.

At the end of June 1834, I met with several dunlins, and shot one of them in the breeding-haunts of the golden plover, in the island of Achil, off the western coast, where they also doubtless

* Mr. J. Poole.

† Mr. J. R. Garrett favoured me with the following note:—

“May 22nd, 1845. The dunlins are, I think, pairing. I saw two pair this evening at the Kinnegar (bordering Belfast Bay) about sunset, rising, each pair together, from the ground high into the air almost perpendicularly, and then descending by rapid sweeps. Some of them occasionally uttered a peculiar and continuous note which reminded me of the bleating cry of the snipe, although much less distinct.” For some time after that date these birds were similarly noticed. There is no breeding-haunt near to where they were thus observed.

had nests. Twice, they rose at the same moment with golden plover, and alighted with them.* About thirty pair, it is said, might be seen in a summer day in the bogs about Lough Conn, and on the banks of the river Moy, county of Mayo.† The dunlin breeds at Portlough, county of Donegal. Of its nesting at the sea-side in this country as it does in Scotland I have no positive evidence; but when at Strangford Lough on the 21st June, 1832, our boatmen stated that although the species did not breed on as many of the islands as formerly, they believed it still to do so on Ogilby and Black Islets, from their having seen numbers about them on the second day of that month. To both islets we went, but no dunlins appeared. One of the boatmen—whose word there was no reason to doubt—assured us that in the summer of 1830 their nests were very numerous on Ogilby islet; their eggs (he remarked) were laid on the gravel like those of the ring dotterel, and though large for a bird of its size, were smaller than those of the latter species. This boatman had, many years before, seen a few dunlins' nests on Island Mahee in this lough, a locality long since deserted by them. We found on this occasion single nests of the ring dotterel, oyster-catcher, and little tern, the eggs in all of which were laid on the bare gravel: several nests of the common and Arctic terns were also discovered, but they were composed either of *Fuci* or *Zostera*, according to the islets on which they were situated.

Mr. J. Poole has made the following good observations on this species:—"Dunlins are by no means shy at night, when one may nearly walk up to them without their being alarmed. When scattered along the shore by the tide edge, they are constantly forming themselves into little knots of three or four in their

* It is remarked by Mr. Macgillivray, that "about the middle of April the purres betake themselves to the moors in the northern parts of Scotland, and in the larger Hebrides, where they may be found scattered in the haunts selected by the golden plovers, with which they are so frequently found in company that they have obtained the name of plovers' pages."—Audubon's Ornithology, vol. iii. p. 581. Macgillivray gives in that work an interesting account of the species in Scotland, as Audubon does in America.

† Mr. B. Ball.

emulous strife for the possession of the little trifles that form their subsistence. I have drawn these birds near me by imitating their melancholy whistle. When wounded, they swim with success and apparent ease."

I have remarked fully the half of a moderate-sized flock of these birds engaged at the same time performing their ablutions most deliberately in the flowing tide.

The summer and winter plumage of the bird under consideration is so different, that until about fifty years ago it was considered in each state to be a distinct species, dunlin being the name applied to it in summer, and purre in winter. The following exceptions to the ordinary plumage at particular periods have been noted. So late as September 26, 1827, I remarked some in which the breast and belly retained the black summer garb, and on the 12th of October, 1836, obtained a male bird in full winter dress: it was in this respect very different from about thirty killed at the same shot, all of them being in the half-dunlin and half-purre plumage common to the period of the year.

When walking from Terracina towards Cape Circello—the fabled island of Circe—on the 7th of August, 1826, I met with a small flock of these birds; and on the 1st of June, 1841, saw five of them at what is believed to be the fountain Inopus, mentioned by Pliny, in the island of Delos. I possess a specimen of this bird, which flew on board a vessel at sea in 1834, in latitude 42° north, longitude 54° west.

THE PECTORAL SANDPIPER.—*Tringa pectoralis*, Bonap., has not been detected in Ireland, but, being an American species, we may yet hope to meet with it. Three individuals only—as particularly noticed in Mr. Yarrell's work (vol. iii. p. 77, second edit.)—have been obtained in Great Britain and the adjacent islets—one in Norfolk, another at the Scilly Islands (by D. W. Mitchell, Esq.), and a third on the coast of Durham.

SCHINZ'S SANDPIPER.

Bonaparte's Sandpiper.

Tringa Schinzii, Bonap.„ *Bonapartei*, Schlegel.*

Is believed, on circumstantial evidence, to have been once procured.

THE following notice was published by me in the 'Annals of Natural History, for 1846 :†—"There is a specimen of *T. Schinzii* in the Belfast Museum, respecting which positive information cannot now be obtained; but it is supposed to have been shot in the bay here, in consequence of having been preserved in a manner peculiar to a taxidermist who set up a fresh 'sandpiper' (as it is called in his book) for the collection on the 15th of April, 1836. All circumstances considered, that sandpiper is believed to have been the one in question :—no *Tringa* was 'mounted' by the same preserver from dried skins. I have compared the specimen with the American one described and figured by Mr. Yarrell, and found identity in the species. The bird under consideration is noticed in the second edition of that author's work, vol. iii. p. 74.

"Only one of these birds, recorded by Mr. Eyton as killed in Shropshire, has been obtained in Great Britain.‡ Its occurrence on the continent of Europe is not noticed in the latest works that I have seen (Temminck, Part IV.; Keyserling and Blasius; Schlegel). North America is its native country."

* This name is given to the species on account of Brehm having bestowed that of *T. Schinzii* on a different *Tringa*.

† Vol. xviii. p. 311.

‡ Subsequently, two are said to have been procured in the middle of October 1846, within a few miles of Penzance.—Mr. E. H. Rodd in 'Zoologist,' vol. iv. p. 1554.

THE LITTLE STINT.

Little Sandpiper.

Tringa minuta, Leisler.

Is a regular autumnal visitant to Ireland ; appearing in extremely limited numbers.

ABOUT the year 1823, Mr. John Montgomery, when shooting on the extensive sands of Dundrum, county of Down, saw a bird either of this species or the allied *Tringa Temminckii*, but from its shyness sought in vain to procure it. On September the 6th, 1831, the first *T. minuta* known to me as obtained on the Irish coast was shot in Belfast Bay, and came into the possession of Dr. J. D. Marshall ; its weight was six drachms. It was shot by James Adams at the curve of the river opposite Consbrook, well known to shore-shooters by the name of Adams's Bay, so called in honour of the sporting cobbler just mentioned, who has plied his awl within gunshot of the place for upwards of half a century. About the same time and locality a second specimen was procured by a person who, attracted by its diminutive size, singled out and shot it from the midst of a flock of dunlins. These birds seemed not to relish the society of such a dwarf, as they were observed endeavouring to drive it away. On the 5th of October, a third individual was obtained at the same favoured spot, and several others were seen on the shore. Adams, when questioned on the subject, stated that previous to 1831, he had occasionally shot the stint in the months of September and October. He saw it, and never more than six together, in company with dunlins : both species kept together in flight as well as on the ground, the stint being able to keep wing with its larger companion—another shooter, of correct observation, describes the beat of its wing as quicker and its flight more irregular than that of the dunlin. On the 14th of August, 1832, I was informed that during the few preceding days two stints had been seen on the shore of the bay. On the 19th of August, 1833, one was

observed several times among a flock of dunlins, the peculiarity of its call having attracted attention towards it;—this is described by one person to be a “singular kind of rattling sound;” and by another (to whom it is more familiar) to be a twittering note, like that of the swallow, but shriller, more rapidly repeated, and of longer continuance. It is said to be very distinct from that of any other shore-bird.

On the 10th of October, 1834, two stints, unassociated with other species, were shot at Dunbar’s Dock, Belfast: one of these had more reddish brown in its plumage than any others obtained previously, and was evidently adult. On September 10, 1836, a stint was seen in the bay. About the 1st of September, 1837, a flock consisting of nine of these birds was observed. Their species being known to our shooters, they were perseveringly followed, and though very wild, were all killed within a fortnight, some falling singly and others in company with dunlins: not more than two were procured at one shot. I obtained six of these specimens and made notes on them (previous to their being skinned) of which the following is an abstract:—in size they were very similar, being about 6 inches in length; tarsi 10 to $10\frac{1}{2}$ lines long; middle toe and nail, $8\frac{1}{2}$ to $8\frac{3}{4}$ lines; bill from feathers on forehead to point, $8\frac{1}{2}$ to 9 lines; colour of bill and legs, in some, blackish, obscurely tinged with green; in others, bill blackish, legs blackish-grey: other characters, being permanent, were reserved for future examination. Their stomachs all exhibited fragments of stone and sand: in one only were there remains of food, which consisted of perfect insects and larvæ, together with minute crustacea. In 1838, a stint appeared in the bay on the 4th of September, two on the 8th of that month, and four on the 24th of October. In 1839, three arrived so early as at the end of July: on the night of the 17th of September, the calls of two or three were heard by a shooter, who, going in pursuit of them on the next morning, killed one. On the following day he procured three along with dunlins, at a couple of shots, and on the 21st, one, together with two pigmy curlews and some dunlins. They have also been killed in company with ringed plover and dunlins. In

1840, a stint was seen on the 26th of August: in 1841, one had come on the 3rd of September and four on the 11th of that month.

Owing perhaps to my neglect, I find no notes of the occurrence of the species in 1842 or 1843. On the 24th of September, 1844, I received a stint which was killed that day in the bay, at the same shot with two pigmy curlews and twenty-four dunlins. On the 8th of December the same year, two stints appeared on the Antrim side of the estuary, feeding at the outskirts of a flock of dunlins, and permitted a near approach. During the autumn of 1845, the rarer sandpipers were very scarce in Belfast Bay; and I have no record of the stints' appearance: even gulls and ducks of various species were less numerous than usual: curlews, red-shanks, and oyster-catchers were in ordinary numbers. A stint was heard and seen on the 23rd of September, 1846, and not very far distant, four of these birds were observed at the outside of a great flock of different species of *Grallatores* congregated during high water, on a floating mass of *Zostera*. On the 5th and 10th of October, similar numbers were seen, and once or twice fired at unsuccessfully;—both parties being supposed to be those previously noticed. They all escaped being killed that season. Between the first and last dates mentioned, they came under the notice of various shooters. Stints were heard calling in the bay on the 2nd of September, 1847. On the 23rd of August, 1848, two were observed associated with a flock of dunlins; and about the 7th of that month I was pretty certain of having seen from a railway carriage a flock of twelve, unmixed with other species. A young bird of the year was shot near Holywood on the 1st of October, 1849.

In so far, with the exception of the first bird noticed, the stint is treated of only as seen in Belfast Bay during autumn, and all except two were shot on the Down shore, within a mile and a half of the town. Every year from 1831 to 1841 inclusive, notes are given of its visiting this locality, with the exception of 1835, when, being myself absent, no record of its occurrence was made. I am not aware of the species having been ever killed here in

spring ; but on the 26th of March, 1838, a flock of five was observed.

In Dublin Bay, this bird has occasionally been met with. About the 1st of November, 1831, Mr. T. W. Warren killed at one shot, at the sandy tract called the North Bull, three stints, along with sanderlings, ring dotterels, and dunlins. One, according to Mr. W. S. Wall (bird-preserver), was killed in September 1836 ; and in that month of the following year (1837) he saw five or six stints in company with some of the last-named species on the North Bull : they were very wild, and kept up with their congeners in flight : their peculiar call was remarked as new to my informant. The stint is said to have been killed on the Dublin coast in the autumn of 1846 ; and one was obtained there, near Baldoyle, in November 1847.* Mr. R. Chute has twice procured this species near Tralee ; three from a flock of five at the end of September, and two in the winter season (1840-1841).

In England this bird has been observed chiefly on the eastern and southern coasts in very limited numbers, and more particularly during its autumnal migration. On the western coast, the Solway is noticed in Mr. Yarrell's work, on the authority of Dr. Heysham, as a place of its occurrence, in which this gentleman had seen it on both sides of the Frith. Lancashire is the only other locality on that coast of the island noticed in the work referred to. Sir Wm. Jardine and Mr. Macgillivray had not at the date of their respective works met with the stint in Scotland. A single specimen is recorded in the 'Historia Naturalis Orcadensis' (published in 1848), as having been killed at Sanday in October 1837.

The Dublin University Museum contains a specimen of *T. minuta* stated to have been obtained at Sierra Leone.

* Mr. R. J. Montgomery.

TEMMINCK'S STINT.

Tringa Temminckii, Leisler.

Has been once obtained.

A LETTER from Richard Chute, Esq., of Blennerville, Tralee, dated February, 1848, informed me that in the first week of that month he had procured a specimen of this bird, killed at the end of January, during severe frost. It was shot by W. Purdon, Esq., at a fresh-water pool close to the town of Tralee, and the one bird only was seen. The form of the tail, its colour, with that of the tarsi and plumage generally, corresponded with Yarrell's description, though slightly darker in hue: the bird was rather smaller than the individual from which that description was drawn up. Mr. Chute saw three of the nearly allied *Tringa minuta* (of which he shot two), a few years previously in a small marsh near the sea-shore in the same part of Kerry.

This is the only *T. Temminckii* I have heard of being procured in Ireland.*

This bird is extremely rare in England, much more so than the *T. minuta*, and is unknown in Scotland. It breeds in Scandinavia.

THE BUFF-BREASTED SANDPIPER.

Tringa rufescens, Vieillot.

Is said to have been once procured in Ireland.

ACCORDING to Mr. F. M'Coy, one "shot by J. Hill, Esq., near the Pigeon-house, Dublin [bay], is preserved in the museum of the Natural History Society" of that city.† When the bird was killed is not stated. It is said to be in the same plumage as that described by Mr. Yarrell:—*i. e.*, a young bird of the year.

* Sir Wm. Jardine, through inadvertence, mentioned the occurrence of the species in Ireland, as on my authority, in the third volume of his 'British Birds,' published in 1842.

† 'Annals Nat. Hist.,' vol. xv. p. 271 (1845).

This species is an extremely rare visitant to England, six individuals only being recorded in the second edition of Mr. Yarrell's work (1845);—two others are noticed in the 'Zoologist,' one as killed on the Sussex coast* (no date given), and another, on the 3rd of September, 1846, near Penzance.† Two of the eight specimens were obtained in the south of England, and one other of them in the west, near Liverpool; the remainder having occurred in the eastern counties, including Cambridge. This bird has not been met with in Scotland. It has been procured in France.

The buff-breasted sandpiper inhabits the eastern shores both of South and North America, but is far from being commonly known, even on those of the latter, which have been so well explored.

THE PURPLE SANDPIPER.

Rock Sandpiper.

Tringa maritima, Brunnich.

Regularly inhabits certain parts of the coast in autumn and winter.

It is but little known as an Irish bird, and differs from the other *Tringa* by frequenting rocky coasts. Mr. Templeton knew it only from specimens hereafter to be mentioned in the collection of the late Mr. John Montgomery of Locust Lodge, Belfast. I shall notice the localities in which this species has been observed from north to south, irrespective of dates. In Mr. J. V. Stewart's catalogue of the birds of the north-west of Donegal,‡ the purple sandpiper is mentioned as "resident and common." In a letter subsequently written, however, that gentleman informed me that he had not been able to satisfy himself respecting its breeding there. The Ordnance Museum contains examples from Portrush, killed in the months of August, September, November, and December, and from Cushendall

* Mr. F. Bond, vol. i. p. 148 :—March 28, 1843, date of communication.

† Mr. E. H. Rodd, vol. iv. p. 1500.

‡ Mag. Nat. Hist., vol. v., 1832.

in March: both localities on the rocky basaltic coast of Antrim. On the county Down shore of Belfast Bay, within three miles of the town, where it is of an oozy nature, with small tracts of sand, two of these birds were seen, and one of them (an adult) shot on the 24th of October, 1844; another had been killed there a short time before. I had not previously known this sandpiper to visit the bay; a flock of eight or nine birds frequented it from the beginning of October that year. On the 28th of Oct., 1845, a single bird (young of the year) was seen, and shot on the gravelly beach at Thomson's embankment a short way lower down the bay than the docks of the town. On the 7th of November, 1849, two were killed together at the Kinnegar; one of them being a young bird of the year; the other floated out to sea and was lost. In March 1849, a purple sandpiper was shot at Gransha Point, Strangford Lough, where but the one appeared, in company with a ringed plover. The following is Mr. Montgomery's note before referred to:—

“*Dec. 3rd or 4th, 1822.*—Got four of these birds out of six on the rocks at Tyrella, about two miles north-east of Dundrum [Down]: they were so tame, although there had been no hard weather, that when shot at, they rose and flew but a short distance. They always alighted on large stones; never on the sands. I killed two out of three, and my companion did the same.” When visiting Dundrum in August 1836, I saw the gentleman here alluded to, who considers that this sandpiper regularly frequents the rocks on that coast about St. John's Point. One of these birds was obtained in the winter of 1837–38 near Lurgan Green, county of Louth.*

Mr. W. S. Wall, bird-preserver, Dublin, presented me in 1833 with an immature specimen which was shot by himself in summer at the Lighthouse beyond the Pigeon-house Fort, Dublin Bay; near to which place the only one of these birds met with on any part of the Irish coast, by T. W. Warren, Esq., was shot by him about the 1st of November, 1831. Another gentleman mentions

* Mr. H. H. Dombrain.

his having seen one here in winter, and that at the end of May he saw a flock of about six, on the rocks at Lambay Island, from which he killed three, all in adult plumage.* A purple sandpiper was observed in October 1846, at a part of this bay, near Raheny.†

Mr. Poole states, with respect to the county of Wexford:—"I shot one specimen of this bird on the 29th of January, 1845, at Ballyteigue Lough: there seemed to be plenty of them on the beach." *May* 15, 1845.—At the Saltees I observed about a dozen, which frequented the rocks near high-water mark, and allowed a sufficiently near approach for three specimens to be procured. They were excessively fat, and the ovaries of the hens filled with backward eggs. Their food was univalve shell-fish." This bird has once been obtained at Youghal.‡ According to Mr. R. Chute:—"a purple sandpiper was shot by the Hon. Mr. Mullins in the last week of November 1846, on some rocks at the entrance of Dingle Harbour, where there was a small flock. The people there stated that some are to be seen on the same rocks every winter. In the following year, two more of them were shot there by that gentleman." A few of what he has now no doubt were these birds, had been seen by my correspondent in the middle of May 1844, on the Magharee islands, Tralee Bay.

This sandpiper, little known in Scotland and England, except as an autumnal and winter visitant to the shores, appears, judging from the descriptions of Sir Wm. Jardine|| and Mr. Selby, to be more frequent in both those countries than in Ireland. The latter author gives us the following interesting account of the species:—"On the Northumbrian coast it is a common bird, and is met with in numerous flocks wherever the beach is bold and rocky. The Fern Islands, which are composed of trap (or basaltic) rocks, are a favourite resort, and it sometimes happens that a few stragglers are left at the period of the vernal migration, remaining through the summer, and breeding on the smaller

* Rev. G. Robinson.

† Mr. R. J. Montgomery.

‡ Mr. R. Ball.

|| 'Brit. Birds,' vol. iii. p. 237.

islets. I have hitherto been unable to obtain the eggs, but have met with the young more than once in the month of June. When in flocks, these birds fly in a compact body, but seldom to any great distance; and, when disturbed, after taking a small circuit seaward, often return to the same exposed rock by the water's edge, from which they started. They feed on marine insects, such as onisci, small cancri, and on bivalve mollusca, &c., which they seek for by turning aside the fronds of the ulvæ, and other maritime plants that grow on the rocks. Their cry is feeble, and not unlike the word *weet, weet*, frequently repeated. In spring, they sometimes associate with the turnstones (*Streptilas interpres*) which affect the same localities."*

The purple sandpiper is a native of North America, and breeds commonly within the arctic circle there as well as in Europe.

THE KNOT.

Ash-coloured Sandpiper.

Tringa canutus, Linn.

„ *cinerea*, Brunn. Temm.

Is very common in the oozy and soft sandy bays throughout autumn and winter: but retires to northern latitudes to breed.

OF all the *Scolopacidae*, which visit us in great numbers, this species appears to be the most restricted to localities of a particular nature—and on some parts of the coast is never met with. The adjoining marine loughs of Larne, Belfast, and Strangford, with their extensive muddy zostera-covered banks and soft sands, suit the knot—or *dunne*, as the bird is called here by the shooters—admirably, and it is consequently abundant in these places. The minute mollusca on which it chiefly feeds are the great attraction, more especially the *Paludina muritica*, Lam., which is only less

* Illust. Brit. Ornit. vol. ii. p. 151.

numerous than the sands of the sea-shore. All the stomachs of knots killed here that have come under my inspection were filled with minute univalve mollusca alone; chiefly with that already named, the young of *Littorina rudis*, &c. This bird does not return from its breeding-haunts to Belfast Bay so early as some others of its tribe: the earliest date known to me is the middle of August;—14th in 1848, and 15th in 1849. Numbers appeared at the date mentioned in the former year, and about three dozen were killed by a shooter near Holywood. They fortunately arrived just in time, not on their own account, but—for the pie-crust; as they were hurriedly made into "*plover pies*," to be set before a monster temperance meeting which took place on the following day in the village. In September the full number arrives, and in very large flocks, chiefly of young birds. Twenty-five have been killed here at one shot with an ordinary gun; and (November 2, 1843) forty-one, together with six redshanks and sixty dunlins, with a swivel-gun. The propensity of the knot and godwit to associate together has been remarked to me by a good observer, but the former species has generally come under my own notice, when keeping by itself.

Knots are easy of approach on their first appearance in the autumn, of which the following is an illustration. A flock, originally of above twenty birds, persevered in alighting near to where they were first fired at until by four shots they were all obtained but one. After being repeatedly persecuted they become very wary, the great body even retiring altogether, or in large flocks, from Belfast Bay in the early morning to the less frequented Strangford Lough, whence they again return in the evening to feed in the former locality during the night. This is their daily practice throughout the later part of autumn and the whole winter, except when there is a very strong wind against them (less than a hurricane hardly affects them), on which occasions they remain in whichever place they happen to be;* in Belfast Bay at all times a few may be seen during the day. Many are

* This is not in opposition to the following remarks, which are strictly correct and applicable to most of the species of *Grallatores* as well as the *Anatidæ*. Mr.

killed at night, when they apparently feed more than by day, both in darkness and moonlight. Shooters are drawn to their vicinity "in the dark of the moon," by their singular chucking call when engaged feeding. A person, hearing the call of these birds one very dark night in October, sought them with a lantern, holding the light side towards them, when they admitted his approach within a few feet, and did not take wing, but ran before the light as he advanced. The following remarks on their call were made by me:—"February 14, 1843.—Frosty weather; a number of knots were feeding in the bay, close to the side of the road on the Antrim shore; the call is a double note, rather peculiar, perhaps a little mournful: it sounded like ventriloquism, as if the birds were in the air instead of on the ground. Could this have been accidental, or owing to a particular state of the atmosphere?"

The flight of the knot is very swift and strong. On the 1st of February, 1845, I noticed a large flock of from a thousand to twelve hundred, sweeping over the banks on the Antrim side of Belfast Bay, rising high into the air, and passing through evolutions similar to those of the dunlin. The first time they swept past, though at some distance, they actually startled me by their silvery flash. It was within two hours of high-water, and the atmosphere was in a most singular state. There was frost, and had been some for a few days previously; the sea-banks, over which the tide flows, and that have usually a cold, wet, muddy aspect, now appeared dry, as if baked, and of a rich brown and dark-green colour. When the large body of knots alighted, a great number of dunlins took their stand at one extremity of the flock. They were nearly half a mile from the road on which I was, and as every individual of the many hundreds was distinctly seen of a silvery whiteness running about feeding on what appeared a rich green carpet of *Zostera marina*,

St. John tells us that "there are very large flocks of the oyster-catcher, the curlew, and the knot, on the sand-banks, &c. (of Morayshire, in April). Whenever these birds want to alight on any spot, if the wind is at all high, they invariably pitch with their heads straight to windward; if they come down the wind to their resting-place, they first fly past it, and then turning back against the wind, alight with their heads in that direction."—"Tour in Sutherland," vol. i. p. 207. Although they do this, they prefer to have the wind with them in their flights.

the singularity of the scene may readily be imagined. The gulls, too, were conspicuous for two miles, though appearing gradually smaller as they dotted the more distant beach. The light was of such a nature, that while each knot and dunlin looked silvery white, every gull appeared of the purest snowy hue.

The numbers of these birds—different from the *Scolopacidae* generally—are as great in the north of Ireland in winter as in autumn. I never knew of more to be seen in Belfast Bay at any period than in December and January of different years. In Strangford Lough they are, from its comparative quietude, still more abundant. It is rarely that any returns can be had thence, but during a week spent there by a wild-fowl shooter in February 1846, they were in extreme profusion; and were again so during the first week of March 1847. The noise of their wings when passing over my informant's head was compared to the rushing sound of a tempest. At night, on the latter occasion, 174 were bagged from one shot of a swivel-gun, and these were obtained by firing across the flock when on the ground; two or three times that number would probably have been killed had the flock been fired at lengthwise. All of this great body were perfectly silent (doubtless awaiting the falling of the tide to lay bare their feeding-ground), and the shooter knew nothing of their proximity until those nearest to him rose to fly away.

They retire northward early in the spring: the latest date before me of any flock being seen is March 24, 1837. I once saw a single bird on the 1st of May, but though apparently "sound in wind and limb," it had probably met with some accident.

The knot is rarely obtained in Belfast Bay in autumn with the red plumage on the breast and belly indicative of the nuptial season. A few birds displaying it came under the notice of Dr. J. D. Marshall, in the autumn of 1828. On the 2nd of September, 1845, three individuals in this plumage alighted within a very few yards of a shooter. One obtained so late as the 22nd of September (1835) came under my own notice; as did another killed on the 16th of August (1848): both are preserved in the

Belfast Museum. The latter is a very handsome specimen ; much of the dorsal plumage being of a very dark rich bronze, in addition to the whole under surface of the body from the bill to near the vent being reddish buff. Mr. R. Chute mentions his having seen the "red sandpiper" of Bewick, (which is the knot in summer plumage,) shot near Tralee. The earliest period at which I have known the full winter plumage assumed was on the 26th of September (1846), when a bird in that state was brought to me : others killed on the same day were in an intermediate state between summer and winter costume. Almost every bird of this species shot in the north of Ireland during autumn is in the plumage attributed to the young of the year ;—with a double band of white and black to the tip of each dorsal feather.

This sandpiper is doubtless abundant in the oozy bays generally, of at least the northern, eastern, and southern coasts ; and I should expect of the western coast also ; but I shall only name the localities whence positive information has been received. In the north-west of Donegal it has been met with, but is considered "very rare."* It is numerous in the bay of Drogheda, and common from August till March about Baldoyle, Dublin Bay.† Mr. Poole notes it as a winter visitant to the coast of Wexford, and that he has occasionally seen immense numbers on sale in the town of that name ; but that at other times several months pass without a single bird being obtained. On some parts of the coast of Waterford it is not uncommon ; and a specimen has been shot inland a few miles from Clonmel.‡ This bird is as yet only known in Cork Harbour from a few individuals having been obtained in different years between August and January.|| It was considered very common on the coast of Kerry by the late Mr. T. F. Neligan, who kindly supplied me with full information on the birds of that county in 1837. Mr. R. Chute, knowing it only as a rare bird there until 1846, since mentioned his

* Mr. J. V. Stewart.

† Mr. R. J. Montgomery.

‡ Mr. R. Davis, jun.

|| Dr. J. R. Harvey of Cork.

having seen many on sale in Tralee during the last two weeks of October and first week of November 1848.

The *Tringa canutus* may be considered fully as plentiful, if not more so, on the shores of Ireland as on those of Scotland or England, though indeed very little data are supplied respecting its distribution in the two latter countries. Mr. Selby gives an interesting account of this bird from his own observation on the Northumbrian coast, which also is the only locality named by Sir Wm. Jardine, in connexion with his own observation upon it.

The knot is common to the temperate and (in summer) to the arctic portions both of Europe and North America.

THE LAND-RAIL.*

Corncrake.

Crex pratensis, Bechst.

Rallus crex, Linn.

Is a common summer bird in Ireland.

OWING to the more humid climate and the general prevalence of meadow-land, it is more equally distributed over this island than Great Britain. The land-rail generally appears in the neighbourhood of Belfast as early as we are told it does in the southern counties of England;—within “the last ten days of April;†” and consequently earlier than in the northern parts of that country, where its arrival is said to occur in “the second week of May.”‡ It was seen or heard there on the 12th of April in 1849 (a single bird only and no more for some time afterwards); on the 20th in 1832; on the 21st in 1833; on the 22nd in 1845 and 1848; on the 24th in 1840; and on the 25th in 1844. About Carrickfergus, the corncrake has been noticed earlier. In M^rSkimmin’s history of

* Leigh, in his ‘Natural History of Lancashire,’ informs us that “the *rail* is a bird about the bigness of a *partridge*, and is common in these parts; it hides itself in the grass, and is discovered by the snarling noise that it continually makes; it is very excellent food, and doubtless of extraordinary nutriment.”—P. 162.

† Yarrell, ‘Brit. Birds.’

‡ Ibid. Mr. Selby remarks:—In the north of England “it is seldom observed before the beginning of May,” vol. ii. p. 177.

that place (3rd edit. 1829, p. 352), it is said "the earliest time they have been heard calling was the 17th of April and the latest the 14th of August." According to a paragraph in the 'Northern Whig' newspaper of April 16, 1842, "the cornrake was heard calling in the neighbourhood of Carrickfergus on the 8th inst., being about ten days earlier than heard at any former period in that district." If correct, this must have been an isolated instance, as in the year 1842, the bird was very late in arrival—or in making itself known by calling—in the neighbourhood of Belfast, where, until the 1st of May, I was not aware of its presence. Its non-appearance before May is a rare occurrence: in 1836 it was very late, and in 1838 later than ever before known, not being heard until the 6th of May, when numbers appeared all at once. Instead of one or two, as is usual on their first arrival, being heard, not less than ten gave forth their calls at the same time, in the grounds of Fort William, on the borders of the bay. Over the north generally they were not quite so late, one having been heard near Downpatrick on the 1st of May, and others on the 4th at the Moyntags, bordering Lough Neagh. According to dates supplied by my informants, this bird would appear not to arrive so early in the more southern parts of Ireland as in the northern, an apparent anomaly which possibly may be owing to less attention being paid to the subject there. In the south of Wexford, the dates given for six years are, April 26, 27, 28; May 3, 5, 7.* The 30th of April has been noted as the earliest date of arrival in the neighbourhood of Tralee;† the 13th of May as the average time about Killaloe on the Shannon;‡ it has been remarked as an early instance that the call was heard at Edgeworthstown (co. Longford) on the 3rd of May, 1838.‡

The arrival of the cornrake in the north of Ireland has no connexion with the early or late state of the meadows. I have remarked the bird here when they hardly concealed its body from view, and in other years that it would not appear until two or three weeks after they were ready for its reception. Fields of grain

* Mr. Poole.

† Mr. T. F. Neligan.

‡ Rev. T. Knox.

and clover are also resorted to, so soon after the bird's arrival as they will afford shelter. Mr. Poole has heard it call early in the season from fields of furze in the county of Wexford, which were better cover at the time than the meadows, and were probably selected on that account.

Everywhere that we go in this island in the months of May, June, and early in July* (irrespective of the vicinity of rivers, which are considered to influence its distribution in Great Britain), except to the mountain top, or to stony and heath-covered tracts, the call of the corncrake is heard, not only at its favourite times, in the evening and during the night, but throughout the day.† From its frequenting the meadows or pastures nearest towns, and even those within them—as the grounds of the Royal Academical Institution, Belfast—the corncrake makes itself heard through the night over a great portion of the towns in Ireland. Owing to its late period of breeding, this bird suffers sadly during the mowing of our meadows, about which time it is generally engaged in incubation. Should it not fall a victim to the mower by the loss of its head, the nest being laid bare is deserted, or if the young have recently “come out,” they are often either maimed or destroyed by the scythe. Bewick, in one of the inimitable tail-pieces to his ‘British Birds,’ represents the catastrophe first alluded to.‡ Fortunately the species is very

* In 1832, an ornithological friend remarked respecting the neighbourhood of Belfast, that after the 13th of July he rarely heard them call at night. On the 25th of that month, I listened to one in 1843, as I did to single birds on the nights of the 28th and 29th in 1848, in different districts. The 18th of July has been noted as the latest time at which they called about Killaloe. Mr. Hyndman heard them during three days in the first week of August 1845, which he spent on Tory Island, off the county of Donegal. They are stated to visit that island annually.

I was told when in the island of Islay (Scotland) that they are numerous there every summer.

† A night watchman in a bleach-green near Belfast, considers that for some time after arrival the birds call by night before they do so by day, and consequently that he is aware of their presence before most other persons—on “nights which are close, and some warming rain,” they first make themselves known. Sir Wm. Jardine states, that “the crake is uttered by the bird when running, but more frequently when seated on some stone or clod.”—‘Brit. Birds,’ vol. iii. p. 332. Such birds as have come under my own notice when calling, were stationary, their necks erect and at full stretch during the time.

‡ Vignette to the Dotterel, p. 328, in edit. of 1821.

prolific, laying not unfrequently about a dozen of eggs: the young can run nimbly so soon as they burst the shell.

It is remarked by Sir Wm. Jardine respecting this rail, that—“In some parts it has decreased and without apparent cause; in the vale of the Annan in the south of Scotland, ten years since, the bird was extremely common, its note being heard in almost every alternate field; at the present time it may almost be accounted rare, during last summer (1841) only one or two pairs being heard within a stretch of several miles.”—‘*Brit. Birds,*’ vol. iii. p. 331. In the north of Ireland, the land-rail became very much scarcer about the same time as the partridge (see p. 58), and continued so for fully fifteen years. They were never more scarce than in 1843, but within the last very few summers they have, like that species, rapidly increased. At no period have I heard them more plentiful (for we hear rather than see the corncrake) than in the summer of 1848, about Cultra, on the borders of Belfast Bay. They were also numerous that season in various parts of Down and Antrim; and in 1849 were equally abundant. Their scarcity for a long period seemed the more remarkable, as they had become, around Belfast, less an object of pursuit by sportsmen, than formerly. Their having ever been so, was unpopular, the bird being a general favourite, and viewed as one of the innocent “guests of summer,” whose note is as well known as that of the cuckoo, and much more frequently heard. From its slow and slovenly mode of flight also, the corncrake is believed to fall too easy a sacrifice to the gun. So unwilling is this bird to take wing, that I have frequently seen it when running caught on the ground by dogs. The power of flight it can exert is, however, considerable when called forth by the pursuit of the peregrine falcon, as alluded to in the history of that bird.

For a short time only after arrival can the land-rail be followed by the sportsman without injury to the meadows or crops which it frequents. He does not again meet with it until the 20th of September, the first day of partridge-shooting in Ireland. So few are then seen, at least in the north, compared with the numbers in spring before they have bred, that the greater portion

has doubtless migrated southwards. In all probability, the old birds which without "let or hindrance" have reared their brood, leave the country with them so soon as they are strong enough for the journey, as in like manner a large portion of swallows depart with their first brood in the month of August, when favourable weather and wind prevail. Occasional birds only, which frequent stubble and potato fields, like partridge, are met with at that time. Through the month of October, few occur, and afterwards their appearance is very rare.* The instances within ten miles of Belfast noted after that time, are as follow :—November 5, 1831, a small bird, probably belonging to a late brood, was shot—November 1, 1834, one, and on the 19th of that month, a brace, were obtained: the latter among rushes on Devis mountain—December 22, 1836, "a pensioner" as to flight, but in good condition, was caught on a rushy field by a friend's setting-dog—December 16, 1840, a mild winter, one quite strong on the wing was shot, and proved to be in excellent condition—"January 10, 1788, eight or ten brace were flushed among the rocks at the Knockagh, one of which was shot: it was rather lean."†—On January 29, 1849, and February 1, 1821, single individuals were killed.

With respect to other parts of Ireland :—At Toomavara (Tipperary) a young bird unable to fly was once caught so late as the 18th of October. In the county of Wexford, land-rails are always met with by sportsmen in the month of October, but not in November.‡ On November 6th, 1848, one was shot in the co. of Cork; twice in January, birds have been killed in the co. of Dublin,|| and in the first week of February 1849, one was obtained in the Moyntaghs, co. Armagh.

The plumage of the land-rail occasionally appears very pale

* A friend shooting at Aberarder, in the north of Inverness-shire, reported a brace as shot in the third week of September 1838; and when there myself in 1842, one was met with in a rushy field on the 25th of September: on the 3rd of October I saw one quite fresh in a poulterer's shop in Edinburgh.

† M'Skimmin's 'History of Carrickfergus.'

‡ Major T. Walker.

|| Mr. R. J. Montgomery.

in hue, and fawn-coloured varieties are sometimes met with. Mr. R. Davis, jun., of Clonmel, procured on the 6th of August, 1841, "a very fine adult bird without the least appearance of ash-grey on the throat and under plumage, which colour was replaced by a rich yellowish-brown." On the 11th of the month he had "from the same place *one half* of a young bird severed by mowers, which, though not fully feathered, was exactly of the same colour, and probably a descendant of the former."

At the end of May 1832, I learned from a relative that one of these birds which he had then living, was taken when young in the preceding summer, and placed in his garden—a very large walled one—where it lived throughout the winter (which was, however, very mild), without being supplied with any food. I have known different land-rails to be kept upwards of a year where they were not exposed to the weather. They fed freely on bread and milk, potatoes, &c., and kept in good condition. Mr. R. Ball, some years ago, supplied me with the following note:—"A pair of corncrakes have passed two winters in the gardens of the Royal Zoological Society, Phoenix Park, Dublin, and seemed to enjoy excellent health. They inhabit a cage together with a ruff, starlings, thrushes, blackbirds, &c. A supply of chopped beef heart, of which all its denizens partake, is daily put in the cage. The corncrakes probably share in various other kinds of food supplied by visitors to the gardens. They show no symptoms of torpidity, though much exposed to cold. The species simulates death when surprised, and in this state, probably, has been supposed to be torpid."

The following interesting history of corncrakes kept in the house of Mr. Spear, Carrickfergus, has been procured by the kindness of Mr. G. C. Hyndman. The first one (full-grown at the time, but probably a young bird of the year) was obtained in a street of that town when hay was being housed, in the autumn of 1823. It became quite tame, and partook of food very various in kind, such as groats (few, however, of them), raw meat, bread and milk, stirabout and milk, yolk of boiled eggs, and butter, which last was especially relished. It also ate worms,

snails, slugs, &c.,* and has been seen to take small sticklebacks (*Gasterosteus*) that happened to be in the water. This bird was very cleanly, and washed every morning in a basin of water set apart for the purpose. It was accustomed to be taken up stairs at night, and brought down in the morning; and of its own accord habitually went out of the cage into a basket containing moss, where the night was passed, and in the morning likewise left the basket and entered the cage in which it was carried down stairs. When allowed to go about the house, the persons to whom it was attached were sought for, and followed everywhere. On becoming unwell, the poor bird took possession of the lap of a member of the family, and looked up to her apparently for relief; though when in health, it resisted all attempts at being handled, flying up at the intruder and snapping its mandibles together. Every spring it called with the usual *crake*, beginning very early in the morning; this was usually commenced in March, but on one occasion was uttered so early as the 3rd of February. As remarked of the bird after this period:—"It would crake quite impudently in the parlour, when brought there to be shown off." Moulting took place in the month of August; but no symptoms of uneasiness appeared then, or at any particular season. At pairing time, this bird was very comical, coming up with its wings spread, and neck stretched out, after the manner of a turkey-cock, and uttering a peculiar croaking note. It would then make a sort of nest in the cage, croaking all the while, and carry a worm or piece of meat about in its bill. So great a favourite was this corncrake that its death was duly chronicled as taking place on the 14th of January, 1830, after having been kept for above six years.

* I have known the horse-leech (*Hirudo sanguisuga*) to be found in stomachs of land-rails killed in a wild state. Three stomachs examined by me on May 15 (1849) exhibited similar food, consisting of the remains of coleopterous insects (which when perfect would have been five lines in length) and of small snails (*Limaces*) as shown by their shells (*Limacellæ*), and these only; the animals themselves having wholly disappeared. Fragments of stone also appeared in these three stomachs. The snail must be rapidly digested in the stomachs of birds generally, as in some hundred cases that have come under my examination the internal shell alone has borne witness to its having ever been there.

Another cornerake lived for three or four years in the same cage with the one described. Having been wounded by a dog, it suffered much for a time after being received, yet ate heartily, and, with great care, soon recovered. This individual never showed the same degree of intelligence or tameness as the other. It was not so partial to washing, perhaps owing to its wounded state, but had the same habit of going to and from the day-cage to the basket where the night was spent. It craked in the season, though not so much as the other, and never exhibited the amusing attitudes at pairing-time which have been alluded to. The sex was not known in either instance. The call is generally attributed by naturalists to the male only. Attempts were made to rear others unsuccessfully: on one occasion a young one was put into the cage with two old birds, which seemed fond of their charge, and endeavoured to induce it to eat by presenting worms in their bills, but ineffectually.

Mr. Knox, in his agreeable 'Ornithological Rambles in Sussex,' mentions as a vulgar belief in the county, that cuckoos become hawks in winter. Such is also a prevalent notion among the uneducated in the north of Ireland. In like manner, it is believed here that the cornerake becomes a waterhen (*Gallinula chloropus*) in winter.

Mr. W. R. Wilde, author of the 'Narrative of a Voyage to Madeira, the Mediterranean,' &c., mentioned to me on his return, that when at Algiers in the month of December he saw several land-rails, and was told that the species wintered there.

THE SPOTTED RAIL.

Spotted Crake.

Crex porzana, Linn. (sp.)

Rallus „ „

Can only be announced with certainty as an occasional—
though probably a regular—summer visitant.

THIS beautifully-marked species, spotted delicately with white, as

if a snow-shower had fallen on it, is much less known than might be in consequence of its habits and the nature of its haunts, which are generally bogs or marshes. From Mr. Templeton's MS. we learn that three specimens had come under his notice, in addition to two seen in the rushy fields of his own farm, near Belfast.

I shall give here the occurrence of the species as known to me from north to south of the island, rather than according to dates. The first which came under my observation was an adult bird shot in summer about the year 1822 at brick-fields, contiguous to the Blackwater in the outskirts of the town of Belfast, since which period two others have been procured about the same locality:—Mr. J. R. Garrett informs me as follows:—"On the 12th, 27th, and 28th of September of the years 1835, 1847, and 1848, I procured specimens of the spotted rail in a large marsh overrun with reeds and other aquatic plants, situated about a mile from Clough (Antrim), where the species is not uncommon in autumn, although I have never been able to find it there in winter. These specimens were so thickly coated with fat that it was almost impossible to get the skins freed from it: their flesh was remarkably tender and delicate in flavour.

"Water-rails, which I shot on the same occasions and in the same marsh, had not a particle of fat on them.

"In the gullet of one of the spotted rails above alluded to, I found two unbroken shells, and in the stomach were fragments of the same kind of shell, together with black gravelly matter.* It is extremely difficult, even with the assistance of a dog, to compel these birds to take wing; but I have seen them, when raised, fly with rapidity for several hundred yards before alighting."

In the vicinity of Bogay House (Donegal) a spotted rail was obtained about the year 1828. In November 1845 one was killed near Downpatrick (Down). In March 1833, two native specimens came under my notice in private collections in Dublin. On the 25th of October, 1835, one was shot at Portrane (Dublin);†

* Two full-grown specimens of *Limneus palustris* are alluded to; minute seeds of plants were in the stomach.

† August 1849, one was received by a bird-preserver in the metropolis.

another was subsequently killed at Douce (Wicklow) late in the autumn, by a gentleman engaged in snipe-shooting. One was shot in the month of October 1834, near Portarlinton (Queen's-county).* The Rev. Thomas Knox notes this bird as very rare, but that two or three individuals were seen, and one of them was killed, on the 7th of September, 1832, at the side of the river Shannon, near Killaloe (Clare) : its stomach contained the remains of some small shells, together with gravel. I was informed in the year 1837, by Mr. T. F. Neligan, of Tralee (Kerry), that he had shot a spotted rail near that town, at the end of July or beginning of August, about five years previously, and that he was aware of four or five having been since obtained. With reference to the same part of Kerry, Mr. R. Chute wrote to me in February 1846 that two or three individuals of this species had come under his notice in the early part of winter, and that he saw one shot after Christmas. He had likewise procured a young bird in the month of August exhibiting some down, and hence concluded that it must have been brought out in the marsh in which its capture was effected. In the 'Fauna of Cork,' it was remarked respecting this rail in 1843 :—"Perhaps more common than is generally supposed. It has been shot by my friend Mr. Adam Parker, in two or three instances within a short time. He and his brother (both ornithologists as well as sportsmen) have not unfrequently met with it for several years past. It occurred also to Mr. Robert Davis, jun., in Tipperary" (p. 13). The author (Dr. J. R. Harvey) further stated in a letter written to me in 1848, that one had been shot in October 1843, near Clay Castle, Youghal, and that a second was subsequently killed in the same locality. In the month of September 1842, a spotted rail was procured near Waterford, where the species is considered extremely rare.†

Most of these birds killed in Ireland have fallen before snipe-shooters, and consequently after the 20th of September. They seem partial to particular localities from the circumstance of their being found frequenting them in different years. There can be little doubt of their breeding in the island, though no

* Rev. B. J. Clarke.

† Dr. R. J. Burkitt.

positive statement can be offered on the subject. They are perhaps about equally plentiful as in England and Scotland.*

The spotted rail appears to be scarce everywhere; its distribution is much the same as that of the land-rail; extending in summer as far north in Europe as Scandinavia. It winters in the north of Africa, &c.

BAILLON'S CRAKE OR RAIL.

Crex Bailloni, Vieill. (sp.)

Rallus „ „

Gallinula „ Temm.

Has been once obtained;

ACCORDING to Dr. Harvey, of Cork, on whose authority I recorded it in the 'Annals of Natural History' for September 1847 (vol. xx. p. 169). The specimen was procured in a bog at Clay Castle, near Youghal, on October 30, 1845, where a spotted rail had been shot in October 1843, and another has been killed since. The fact of this bird's appearance in the same locality suggests the question, Could its young have been mistaken for *C. Bailloni*? but the individual in question is considered to be undoubtedly the latter, by two acute ornithologists. The one, Mr. R. Davis, jun., of Clonmel, judged, indeed, only from the description supplied by its possessor (Mr. S. Moss, of Youghal), but that was considered sufficient for him to announce the species to me as certain. The specimen was kindly sent to Cork for Dr. Harvey's examination, but being in a closed glass case he was unable to take the measurements.† He remarks:—"Along with it, however, was a spotted crake for comparison, about half the size of which the other appeared

* A sporting friend shot a spotted rail some years ago in the autumn on his moor, near Ballantrae, Ayrshire.

† Mr. Moss, who preserved it, noted the length as 7 inches; wings expanded $10\frac{1}{2}$ inches; weight 1 ounce.

to be. Its colour above was deep brown, rather less olive than in *C. porzana*, densely dotted with white spots, and semicircular markings of that colour; throat, neck, and breast lead or blue-grey; chin faintly white. No *streaks* (properly so called) on the back or any part." This description being applied by me to specimens in the British Museum and Mr. Yarrell's collection, they exhibited a perfect agreement with it, excepting that the white markings were, in some parts of the plumage of the few individuals examined, disposed in the form of streaks. The semicircular markings alluded to would, however, it may be presumed, approximate in form to streaks.

About six individuals of this species have been procured at various seasons, in different parts of England (Yarr.), but none in Scotland (Jard.). The data before me do not exhibit its distribution or migration northward of the British Islands on the European continent. It is a bird of temperate and southern Europe, and found extensively over Africa and Asia.

THE LITTLE CRAKE, or OLIVACEOUS GALLINULE.—*Crex pusilla*, *Gallinula minuta*. Cannot at present be included in the Irish catalogue, although half as many more individuals have been obtained in England, than of *C. Bailloni*. It has not been met with in Scotland (Jard., &c.). What is said of the distribution of the last species will equally apply to this, excepting that it is not found extensively over Africa.

THE WATER-RAIL.

Rallus aquaticus, Linn.

Is permanently resident throughout the island, though little known except in winter; when it falls a sacrifice to snipe-shooters.

A YOUNG bird just escaped from the nest at Springmount, near Clough (Antrim), was once taken by Mr. J. R. Garrett, who some seasons afterwards shot a young bird of the year there on the

28th of September.* Late in the month of July 1831, a brace of these birds were shot on their rising from a drain contiguous to Ballydrain Lake, near Belfast, where the poor victims had probably a nest. The gamekeeper at Tollymore Park (Down) informed me that he saw the species in his neighbourhood during May 1846, and believed it to be breeding, though he could not find the nest. At Ballitore (Kildare) and Roxborough (Cork) Mr. R. Ball has met with the nests of the water-rail; and the bird itself has been observed at the end of May near Lough Conn † (Mayo). The species is not uncommon about Clonmel, where it breeds in deep wet bogs, and lays its eggs about the beginning of May. ‡ It is common and resident in the county of Wexford, and called there the little waterhen. || The Rev. T. Knox considers this bird as abundant in the county of Westmeath (but does not mention at what season), and has seen it about Killaloe, on the river Shannon.

Mr. Yarrell imagines there are more water-rails in Great Britain in summer than in winter, and remarks that the bird “has been killed three times in winter in Scotland, and several times in Sussex, Kent, and Oxfordshire.” With respect to Ireland, I have occasionally been disposed to believe that there must be an increase by migration to the number of water-rails bred in the country; that they arrive in autumn, remain during winter, and depart northward in spring. The numbers shot around Belfast in autumn and winter are not, I feel certain, all bred in the district, though it is possible they may have

* It differs from an old bird killed at the same place, two days afterwards, and from the many adults which I have seen, by having the entire under surface from the lower part of the throat to the vent of a dull buffish colour, with irregular transverse bands and markings of black. Some three or four plumes only on the flanks at each side exhibit the white transverse bands on the black feathers, which, being numerous in the adult bird, constitute its chief beauty. The spurs on the winglet of this young bird (whose sex was not noted) are sharper than those of the very few adult males and females which I have examined. The smallest was on the handsomest male that has come under my notice (killed March 15th), having the throat of a pure white, and the irides of a hue between coral and orange-red.

† Mr. Bent Ball;—who, when a boy, frequently found it in snares which he had set for snipes in the neighbourhood of Youghal.

‡ Mr. R. Davis, Jun.

|| Mr. J. Poole.

been within the island. They are more or less plentiful, too, in different years—in the winter of 1834, they were particularly numerous, and killed by all our sportsmen (to whom from their mode of flight they prove the easiest of shots): a few were also daily to be seen exposed with other birds for sale in the shops of Belfast. Within the first week of January 1841, Mr. J. R. Garrett saw many about Clough, and not less than a dozen in the course of a day.* The greatest number that has occurred during one day in Down and Antrim, to another sporting friend (who has had excellent opportunities of meeting with them) was six, which he saw in the King's Moss (Antrim) on the 20th of September, 1836. Further, the species was known only to my correspondents in the north-west of Donegal,† the neighbourhood of Dublin,‡ and county of Kerry,|| as an autumnal or winter visitant.¶

The first of these birds that fell to my own gun when I was a juvenile shooter, did so under singular circumstances. I had fired at a snipe on Holywood warren, wounded (as was imagined), and marked it down. On walking towards the spot where it pitched or fell, and looking cautiously about when within a near shot of the place, I saw a bird at the edge of a little plashy spot, bleeding apparently at the bill, which was concluded to be the dying snipe. Lest it should escape again, I fired at the bird on the ground, and to my amazement on going to the spot, the victim appeared in the shape of a water-rail, a species which I had never before seen, and the natural redness of whose bill led me to believe it was that of the snipe covered with blood. The snipe could not again be sprung, and probably had dropped dead. At all events it was the innocent cause of the death of the water-rail.

* They are common in the same haunts here at all seasons of the year.

† Mr. J. V. Stewart. ‡ Mr. R. J. Montgomery. || Mr. T. F. Neligan.

¶ In the island of Islay, Scotland, it is known only to the keeper as a bird regularly seen in winter. I do not, however, take it for granted in any of these instances, that the species is in the locality only at the seasons named. In autumn and winter alone will it come under the direct notice of the sportsman.

On the 15th of September, 1832, I saw in a gunsmith's shop in Belfast, one of these birds, which had been taken alive a day or two before. It was very expert at catching flies in the shop-window, running a tilt at them quite regardless of the presence of the stumbling-blocks which beset its path in the form of pistols, turn-screws, &c. When approached, this bird struck wickedly with its bill and feet, but never with its spurred wings.*

The food, &c., contained in seven water-rails examined by me were—in March '35 : a few seeds; the remains of a horse-leech; sand and gravel.—December '35 : a few hard seeds and part of a broad-leaved plant.—January '36 : two moderate-sized specimens of the fresh-water shell *Limneus palustris* and a small *Limneus pereger* :—another in the same month; a few seeds, some soft vegetable matter, and small gravel.—April '36 : one filled with seeds and the remains of insects.—October '37 : one filled with portions of shells of the genus *Limneus*, of which a purple fragment denoted *L. palustris*.—December '37 : seeds, worms, a perfect insect and larvæ, with the addition of gravel.

A water-rail, fed on portions of bullock's head chopped small, lived in fine health and plumage for two years in the Royal Zoological Gardens, Phœnix Park, Dublin.†

Mr. Yarrell remarks, with reference to England, merely that this species is "less numerous than the land-rail;"—in Ireland the relative difference of their numbers, considering the whole year, is probably as one water-rail to five hundred land-rails. From his description and that of other authors, in reference to England and Scotland, the water-rail seems fully as plentiful in Ireland as in either of those countries, perhaps more so than in Scotland.

* The jacana is stated to use the spurs on its wings in fighting.

† Mr. R. Ball.

THE COMMON WATERHEN.

Common Gallinule; Moorhen.

Gallinula chloropus, Linn. (sp.)

Fulica „ „

Is abundant throughout Ireland, and permanently resident.

THERE is not anything peculiar respecting this species to be brought forward in the case of migratory birds, or which might not be said of it in any country. It is equally common in Ireland, Great Britain, and the Continent of Europe. The interesting operations connected with its nest have been pleasingly treated of by Mr. Selby* and others; but a few additional instances of the bird's intelligence may be selected from notes in my possession. It may, however, first be observed, that the waterhen visits uninvited, and eventually takes up its abode at localities where protection is afforded:—its tameness, handsome appearance, and lively motions combined, render the bird everywhere very attractive. To Wolfhill, near Belfast, where I spent many summers, it thus came, increased rapidly in numbers, and was to be seen tame as any poultry;—coming within a pace of where one stood. Little troops of them were partial to the stable-yard, in which they fed with the fowl, and so many as fourteen would often appear at the same time. A dozen might be reckoned roosting on a single bush in the autumn: though the pond they frequented was surrounded by trees and shrubs. A bird would sometimes remain perched on one foot for the night (or so late as any person was out of doors to observe it), on the top of a large stone in the pond. At this place, a pair once seemed even to prefer the vicinity of man in selecting a site for their nest, which was built in a heap of stones within a few paces of where

* Illust. Brit. Orn. vol. ii. p. 188, and Berwickshire Naturalists' Club Proceedings, p. 84.

labourers were daily at work, though places of the most retired character were quite contiguous. Two pair having nests there in the summer of 1831 had them destroyed by the sudden filling of the pond in which they were placed, after it had been for a long time dry. The calamity seemed to provoke their wrath, as a very obstinate engagement ensued. They fought while standing in the water, and struck each other with their feet, crowing loudly in defiance all the time.* After the destruction of these two nests, three were made, one on the top of a very large stone in the pond; another at the base of the stem of a willow, which grew horizontally over the water before shooting upwards; the third on the ground within a foot of the water's edge. On the 10th of September that year there was an incursion of waterhens to the pond, when the old pair, together with their young, which had been brought out there, took possession of an island, and, like sentinels, kept moving along its borders. Whenever any of the new comers attempted a landing they were completely beaten back—it was an amusing scene from the whole being conducted with soldier-like regularity.

When this pond was filled in May 1832, after having been for some time dry, there were also two nests of the waterhen, one of which was on the stem of an overhanging willow. When the water approached it, one of the pair kept running quickly to the nest with small sticks in its bill, while the other remained there, to fix them beneath, so that before the water reached the eggs the nest was raised about six inches: this unfortunately proved to be labour in vain, as the eggs were destroyed.† The same pair afterwards

* Mr. R. J. Montgomery, writing to me on the 9th of March, 1849, remarked—“Waterhens when pairing, fight violently for the females. They stand nearly upright in the water and strike with the feet. I watched a pair the other morning for half an hour, while they struck each other until one got the better of his antagonist. He then seized him by the head with his beak, and would I think have killed him had I not thought proper to interfere. The female all the time looked on quietly.”

† Mr. Selby, in an interesting communication to the Berwickshire Naturalists' Club, mentions a pair of waterhens not only adding to their nest under similar circumstances but removing the eggs until the nest had reached its height, when they were safely replaced. A remarkable instance of the intelligence of this species is given in Stanley's 'Familiar History of Birds,' vol. ii. p. 127, 3rd edit.

made a nest among the grass on the bank, without using any sticks in its construction, though these were abundant closely around. The nest was partially lined with dead leaves of the laurel: the brood was brought out in safety. The old bird took the young under her wings (especially in the evening), as a hen does her chickens, concealing them in the same manner from view. There was now another nest made, to which the parent would call her brood, and remain in it with them for some time. The waterhens never covered their eggs on leaving the various nests at Wolfhill, though, according to the observations of Mr. Selby, such is the habit of the bird.* Their not doing so, however, at this locality, is only another proof of their intelligence. We have already seen that when a pair lost their eggs from these being overflowed by water, they made a nest close by "on the firm-set earth," and that, instead of the usual course, when the nest is built about water, of elevating it on a mound of sticks, dispensing altogether with them, though they were plentiful around:—we now see them departing from the ordinary habit of covering the eggs, in a locality where they found themselves protected and knew they had no enemies to fear.

Some birds rear two or three broods in the same nest, and even return year after year to it. On the other hand, the waterhen is not always content with a single nest for one brood, but will make a second one or raft, and sometimes several rafts for it: these, however, being slightly made, are soon constructed. A friend, one evening, having laid a branch of a tree beside his pond, was surprised the next morning by seeing one of these nests not only completed on it, but the old bird and her young in possession, although the nest in which the brood was brought out was at the time perfectly good. A pair of these birds which frequented another pond near Belfast, made several rafts for their young, though the nest remained uninjured. Once at this pond, where a pair only breeds, a nest containing five or six eggs was inundated, and entirely covered with water for about seven hours, when it was feared that the vitality of the eggs would be destroyed;

* Vol. ii. p. 190.

but the young birds, nevertheless, issued from all the eggs a fortnight afterwards. Mr. R. Davis, jun., has seen the nest of this species placed on the water, after the manner of the coots;—supported by rushes far out from the shore.

The waterhen breeds twice, perhaps thrice in the season:—notes are before me of seven eggs being in a nest in the middle of April; nine on the 9th of June; and a young bird not more than a day old appearing on the 18th of August,—all, it was believed, the produce of one pair at the Wolfhill pond. Mr. Poole mentions, from his own observation, an instance of a waterhen laying her eggs in the deserted nest of a magpie, situated in a tree about twenty-five feet above the ground in the immediate vicinity of a river.

This species dives well, and feeds when so doing, as has been proved by Mr. Selby, who has “several times known it to be taken by a line baited with an earthworm for catching eels and trout,” p. 189. The stomachs of four examined by me in winter and spring contained in addition to sand or gravel, vegetable food only, as grasses, rushes, seeds, &c.

The waterhen has a singular habit of remaining with the body under water, and the bill and forehead only exposed to view, at which time the bird will not stir, though closely pressed. It has also a habit which I do not remember to have seen noticed by authors; that of flying very much by night, particularly by moonlight. Its note, uttered while on wing, I have heard at a considerable distance from any water as the bird passed overhead, thus denoting that at such times it goes far from its daily haunts.

The waterhens about the river Lagan near Belfast are often very attractive to the pedestrian on its banks. When walking there opposite Belvoir Park, about four o’clock on the 27th of December, 1839, it was highly interesting to observe numbers of them which had crossed the river to feed about the canal track-line, return to their places of concealment on the opposite side. This was owing to the water being quite still and in deep shadow (the afternoon was frosty and very light for the season), while each bird

by disturbing the surface produced a silvery light before its breast as it advanced, and left behind a double track of the same kind, so as to exhibit its dark-coloured body to great advantage. Several appearing at one view on the water, though all separate, imparted variety to the scene:—the laggards had, as usual, to betake themselves to their wings to reach their place of refuge when I advanced. One day in January 1843, I was amused by observing the different methods of escape of these birds under similar circumstances. It was near sunset, and the water beautifully still, with a pale golden gleam upon it. At this period of the day, the waterhens regularly leave the side of the river at which they are preserved, and betake themselves for the night to the better feeding-ground at the opposite side, where during the day they would be too much disturbed to remain. On my near approach, some of these birds contented themselves with swimming across the river—others flew right over it “without impediment or stop”—while a third party, though flying, dipped their legs in the water at the distance of every yard or so. This may seem too trivial to be noticed; but it had a momentary interest from being apparently indicative of the different feelings of the birds. One, all confidence, *swam* across the stream—and beautiful was the \wedge like figure it made on the golden water—another, all fear, took at once to its wings—whilst a third, partly from confidence and partly from fear, essayed to fly across, stooping half-a-dozen times to swim, but, wanting in resolution, neither swam nor flew properly. The effect of a dark day on these birds was evinced here by their flying in numbers so early as half-past two o’clock (November 30, 1838) to their evening feeding-ground usually resorted to at twilight. They are partial to feeding in the stubble fields bordering the river as well as among a natural growth of aquatic plants.

Mr. R. Ball supplied me with the following note a few years ago :—“ The stock of waterhens originally inhabiting the pond at the gardens of the Royal Zoological Society, Phoenix Park, Dublin, has been very much increased of late years. They add a good deal to the scenery of the garden early in the morning, when

they may be observed in all parts of it, especially plundering the paddocks in which waterfowl are kept. On being approached they make off with great celerity, running up the latticed wire-work that surrounds the enclosure with singular facility, which they are enabled to do by means of their long toes. Being for the most part pinioned, they could not otherwise get out of the paddocks."

December 6, 1849. — We very rarely see any variety in the plumage of this bird; but a fresh specimen pied with white came under my notice to-day at Mr. Glennon's, Dublin. Its neck was nearly all white; about one-third of the upper portion of the wings next the back was also of that colour. The lower part of the neck and breast exhibited as much white as black: all the other parts of the plumage had white intermixed with the ordinary black colour.

In a pond at Kew Park, connected with the Royal Botanic Garden, the surface of which is covered with *Potamogeton natans*, I once (in September 1846) remarked several of these birds, on my approach, run along the surface of the floating leaves as freely as on dry land, thus reminding me of what is stated of the *Jacana*.*

* MARTINICO GALLINULE. *Gallinula Martinica*, Gmel. A communication from Richard Chute, Esq., of Blennerville, county Kerry—a gentleman who has contributed much to our knowledge of the birds of that part of Ireland—written in March 1846, mentioned his having received for examination a stuffed specimen of a bird which had in a fresh state been blown upon the coast near Brandon. It was said to be of a species unknown as British, and not described in any work to which he had access. A description of it was therefore sent to me. The dimensions of the different parts, and the colour, so far as noted, agreed with those of the purple gallinule (*Porphyrio hyacinthinus*, Temm.) of authors. After having compared the description of the specimen with one of these birds in the British Museum, and found an agreement there also, I noticed the circumstance in the 'Annals of Natural History' for 1846 (vol. xviii.)

Mr. Wm. Andrews (Secretary to the Nat. Hist. Society of Dublin), to whom the Martinico gallinule was known, subsequently saw the specimen at Mr. Chute's, and stated that it was of this species. He kindly supplied me with particulars, leaving no doubt of the correctness of his decision.

It is unnecessary to repeat the sources of error further than to state that the bird was considered immature, and its tarsi were said to be of a red colour. Being so painted, my correspondent naturally imagined that they had been red when the bird came into the preserver's hands; but, as afterwards proved, they were then yellow. It was found about the first week of November 1845, lying dead in a ditch near the village of Brandon, which is on the sea-coast. It came under the inspection of Dr.

THE COMMON COOT.

Bald Coot.*

Fulica atra, Linn.

Is permanently resident, and breeds in suitable localities throughout the island,

WHICH are chiefly lakes, either in wild and sequestered places or in game-preserved demesnes, having abundance of herbage about their borders. Lough Beg, near Toome (Antrim), Lough Achery and the lakes in Hillsborough Park (Down), the lake in Lord Lurgan's demesne (Armagh), may be named as a few of the breeding-haunts in the north-east of the island;—in all quarters of which the bird has come under my notice, and nowhere so abundantly in summer as on the river Shannon, northward of Lough Derg.

On the 27th of June, 1832, I saw at a cabin on the borders of Port Lough, near Dunfanaghy (Donegal), four young coots a week old, which had been "brought out" under a common hen, and were about the size of newly-hatched chickens. They were black, except about the head and neck, which being covered with yellowish-orange and coral-red *hairs*, imparted to them a singular and handsome appearance. They were so tame as to come to any one when called and eat potatoes or dough out of the

Williams of Dingle in a recent state before being skinned for preservation. The specimen was given to Captain Clifford, Inspector of the Coast Guard there, preserved and stuffed by one of the men under his command, and subsequently presented to Mr. Chute.

Owing to the circumstances of this bird's occurrence, I give it only in a note. Wilson (in his *Amer. Ornith.* vol. iii. p. 189, Sir Wm. Jardine's edit.) remarks, that "during its migration [in spring and autumn] this bird is frequently driven to sea." He mentions one having flown on board a vessel in the Gulf-stream in May and another which did so in August, when the vessel was proceeding from Savannah to Philadelphia.

Audubon likewise states that this bird "not unfrequently alights on ships at sea," and, among other instances, mentions three individuals having been caught 300 miles from land, one of them having come through the cabin window."—*Orn. Biog.* vol. iv. p. 40.

* This name is commonly applied to the bird in Ireland. The waterhen is called *coot* in some parts of the south, where *bald coot* is the distinctive appellation of the other species.

hand: the hen tended them with the greatest care. Mr. Darragh (curator of the Belfast Museum), when visiting the two lakes at Hillsborough Park, on the 10th of June, 1845, saw at one of them two nests, having each five eggs, far advanced in incubation; at the other lake were nests also, but the eggs had been taken from them by the gamekeeper, under the impression that the coots disturb the wild ducks which are abundant there, and are captured in great numbers during winter for Lord Downshire's table. On one of the lakes, having no trees or shrubs projecting over its surface, the nests were built in rushes, and composed of grasses and other plants. On the other, partially surrounded by woody thickets, they were placed, like the nests of waterhens, upon branches hanging over the lake, and composed of sticks, forming heaps, from twelve to eighteen inches high: some of the sticks were an inch and half in thickness. They were supposed to have been constructed from the old nests of herons, which had been blown into the lake. In the county of Wexford, Mr. Poole once found three eggs worked up into the substance of a coot's nest, so as to leave scarcely any of their upper surface visible; and it was a matter of no little difficulty to remove them without breaking; above the three, eight eggs were disposed in the usual manner. A waterhen, which made a nest on one of that gentleman's ponds, after completing the foundation, deposited at least one egg on it, and proceeded—using grass and rushes—with the elevation of the structure. The first egg having been thus covered up, the usual number was laid on the grassy lining.

It is remarked by Mr. Selby, that "the coots in the north of England and in Scotland regularly quit their breeding-stations in autumn; and that after the month of October not an individual is to be seen in their summer haunts" (vol. ii. p. 194). Sir Wm. Jardine observes, that in the south of Scotland "a straggling few only remain during mild winters" ('Brit. Birds,' vol. iii. p. 345). In Ireland, where the winters are less severe than in Great Britain, these birds remain constantly about their summer quarters unless hard frost sets in, when they are driven

for a time to the sea-coast. At such periods they appear in Belfast Bay in considerable numbers, and are amply provided with food. A flock of coots feeding at the fall of the tide on the oozy *zostera*-covered banks is a very entertaining sight from the bustle that prevails: they may be seen in all attitudes, and running about with great, though awkward activity. So well pleased are they with their quarters here that they occasionally remain for some time after the frost is gone, but generally they return to their native homes on its disappearance. The wild-fowl shooters in our bay never think of firing at the coots, nor are they eaten here, though on parts of the English coast they command a ready sale for the table, and are therefore sought after by the fowler. The few stomachs of coots that I have examined contained green vegetable matter with sand and gravel.

In the following note the coot is introduced:—*Belfast, January 10, 1841.*—"Within the last few days there has been a good deal of snow and intense frost; yesterday there was heavy rain from noon; but last night it froze again, and during this day there has been keen frost. About the time of high water I walked three miles along the road skirting the western side of our bay. The day was very bright and beautifully calm, and the various birds appeared to the greatest advantage. A haziness concealed as with a golden veil the opposite shore of Down, so that everything looked the brighter with such a background. The sea-gulls were of an exquisite whiteness. Near the shore were large masses of ice and snow, on the outermost of which a number of herons were perched, looking like storks, as the sun brought brightly out, especially in the adult birds, all the white of the under plumage from the head downwards: what was dark in their dorsal plumage seemed merely white thrown into shade, so remarkable was the optical deception. Others of these birds were perched during high water on some very old pines near the road, whence issued the harsh and singular sounds of a heronry. When the tide rose to near the highest point, about forty curlews in a flock left the shore, and flying very low over my head, took their station in one of the Parkmount fields, patiently to await

the ebb. The redshanks were, as usual, calling in a lively manner, and displaying in flight the beautiful white marking of their wings. The ash-coloured sandpipers (*Tringa canutus*) were pretty and noiseless. The dunlins (*Tringa variabilis*) were in thousands, and, when on flight, most attractive, the silvery white of their upturned wings even dazzling in the sun-light. A flock of coots brought here by the severity of the weather, in their pitchy and unrelieved blackness formed a fine contrast to the snowy gulls near which they floated. Among the gulls alone what variety in the several species and in birds of various age! Even in form, how different is the long narrow wing of the two black-backed kinds (*Larus marinus* and *L. fuscus*)—and much of the same breadth throughout, with its pure white binding, making it look still more narrow—from the short and pointed, or triangular-shaped wing of the black-headed species (*L. ridibundus*). Four adult individuals of *Larus marinus* were on wing together, and several others, adult and immature, in view—one of the latter in his dull garb venturing to fly with his senior in full costume, was indignantly driven back by him. Herring gulls (*L. argentatus*) added much to the life of the scene by dashing down from a height of about twenty yards on their prey near the surface of the water, while so clear was the atmosphere that the black extremities of their quill feathers were quite conspicuous. Wild ducks occasionally rose on wing, and large flocks of wigeon were on the water in the distance.”

Mr. R. Ball writes, “A great many bald coots frequent the pond at the gardens of the Royal Zoological Society, Phoenix Park, Dublin, where several pair annually breed. Mr. Scott (the curator) states that the hen coot makes a second nest long before her first brood are able to take care of themselves, and that they are then taken charge of by the cock, who provides for them while the hen incubates a second clutch. I saw a coot drop an egg here while flying; it fell on some herbage and was unbroken.

“A purple coot once kept at the Zoological Gardens exhibited a very remarkable power, little to be expected from such a bird.

On throwing a piece of bread, too large to be swallowed, the coot took it up in its foot, as a parrot does a nut, and pecked it to pieces. The food was held in its curiously-formed foot as perfectly and steadily as possible. Those possessed of tame bald coots may try whether they possess similar powers."

When boating on the Lake of Lucerne, Switzerland, towards the end of June 1826, I remarked the coots to be numerous about the reedy borders, and particularly tame.

THE GREY PHALAROPE.

Phalaropus lobatus, Linn. (sp.)

Tringa lobata ,,

Is an occasional visitant, more especially late in the autumn.

ALTHOUGH it can only in strictness be called an occasional, as distinguished from a regular or annual, visitant, it has frequently been obtained within the last twenty years from north to south of the island.

The first instance of its occurrence known to me took place on the 22nd of September, 1818 (the date ascertained from Mr. Templeton's journal), when one which appeared on some water in the district of the "Falls," near Belfast, was wounded in the wing, and came into the possession of John Sinclaire, Esq., who kept it on one of his ponds for some months. It was fed on worms, was very tame, and its buoyancy on the water met with the highest admiration: it is described to have been light as a cork upon the surface. Another was obtained near Clifden, on the shore of Belfast Bay, on the 9th of April, 1822.* Memoranda kindly communicated by Dr. J. D. Marshall, inform me of a phalarope which was presented to him having been shot near Clontarf, Dublin Bay, in November 1827; and of two birds having been killed in the same quarter in the spring of the year 1828: some of these which he weighed were nine drachms.

* Dr. J. L. Drummond.

In the month of November 1830, one frequented the dam at Ballydugan mills, county of Down, for about a week, when it was shot, after having, by the elegance of its motions, afforded high gratification to all who saw it.* The individuals hitherto noticed (with one exception) seem to have been solitary wanderers.

In the autumn of 1831, however, there was quite a migration of phalaropes to Ireland. Late in the month of October, I then saw in the shop of a bird-preserver† in Belfast, at the same time six fresh specimens, and in the possession of an amateur taxidermist a seventh.‡ These were shot at four different localities remote from each other, in the county of Down. One was obtained inland, near Rathfriland, on the 26th of October, upon which day three were killed on the coast at Dundrum. At Donaghadee, on the 29th, one, and near Portaferry, about the same time, two, were shot. Of those killed at Dundrum it is remarked in a note now before me, made by the late Mr. John Montgomery: "The first one I saw close by the edge of the river, between the outer and inner bay, and knew to be a stranger by its graceful movements; it dipped its head often and seemed to be feeding; was very tame and showed no fear when we came within twenty yards. About ten minutes afterwards we came within sight of a pair of these birds. While rowing in-shore to get near them, I was amused with their liveliness in sipping the water and playing round each other in a circling and graceful manner. Their plumage indicated a change between the grey and the white."|| On the 25th of October one was shot at Conswater, near Belfast, and not far distant, on the county Down side of the bay, two more (which came under my inspection)

* Mr. Wm. Sinclair.

† On skinning them he particularly remarked the closeness of the feathers on the breast, and that those next the body were black.

‡ These specimens had the forehead white; other parts of the head dark brown, of which colour the scapulars and quill feathers also were; wings rather below the carpal joint, bluish; entire back, fine bluish-grey; all the under parts pure white.—Dr. J. D. Marshall.

|| Two more phalaropes were killed at Dundrum a few years afterwards.

were obtained about ten days afterwards : on these being shown to a "shore-shooter," he remarked, that he had seen a flock of similar birds in the bay, but from their being so small he did not think them worth firing at. It was probably about this time that a phalarope in the collection of John V. Stewart, Esq., of Rockhill, Letterkenny, was procured in the north-west of Donegal. A letter from that gentleman written in February 1837, mentioned that his specimen was shot on the sandy beach near Dunfanaghy, late in the autumn a few years previously, after very rough weather. A pair appeared, but they were so very shy, that only the one could be approached within gun-shot. In the possession of Wm. Massey, Esq., of the Pigeon-house Fort, Dublin Bay, I saw two phalaropes which were shot there by that gentleman, on different occasions in the autumn of 1831 : about the same time, three others were seen together in the bay, and one of them killed.* It was perhaps at this period, also, that Mr. T. W. Warren (as he informed me a few years afterwards) shot a phalarope from Kingstown pier, Dublin Bay. Its beauty, together with the animation and gracefulness of its motions, attracted his admiration and desire to possess it, and he killed the bird with a rifle loaded with single ball.

At the time that Ireland was visited by so many phalaropes, there was a similar migration of them to England. From Mr. Heysham, of Carlisle, we learn that :—"On the 31st of October [1831], a grey phalarope was killed about three miles from the Solway Firth. * * * Three other specimens have occurred in this part of the county during the same month, namely, two on the coast not far from Allonby ; the other in the vicinity of Bowness."† One was stated in the 'Taunton Courier' to have been shot in that neighbourhood in December 1831.

Early in the morning of the 2nd of September, 1833, Dr. J. D. Marshall saw from the road, on which he was driving at the time, at the Glynn, near Larne (co. Antrim), what he believed to

* Rev. T. Knox.

† 'Philosophical Magazine,' 1832, p. 85.

be two of these birds ; one swimming in a little pool of water near the shore, and the other wading at the edge. On the 18th of October, 1834, a phalarope was shot near Holywood, Belfast Bay, when "swimming and ducking," as the shooter expressed it: the bird was alone. The Rev. Mr. Carter described one as having attracted great attention on a small pond at the seat of Sir John Ribton, about the year 1835. It was there for some days and permitted a very near approach. Mr. R. Ball saw a phalarope about the same year, which had been caught by getting entangled in some herring nets spread out to dry. Though but a few hours captured it fed from the hands of the gentleman into whose possession it came, freely eating many fragments of herring. "The self-confidence of this bird" (as remarked by Mr. Ball) "in permitting the near approach of man is a very curious circumstance. It is known as a general rule that the wildest birds become soonest tame, and that the tamest, such as the robin and house-sparrow, bear confinement with the greatest impatience, yet here we have a bird permitting familiar approach and reconciled at once to captivity."

On the 1st of December, 1835, a phalarope was shot at Portmarnock, near Dublin.

On the 30th of January, 1836, a beautiful specimen in the highest condition came into my possession just after it was shot at the Salt-pans on the borders of Belfast Bay, very near the town. The shooter described it as swimming most rapidly, and as flying like a tern or sea-swallow: its agility in getting out of the little pools of water left by the retiring tide to feed upon their banks, and rushing back again to float upon their surface, astonished him—all seemed to be but the effort of an instant. Several seeds, and a specimen of the univalve shell *Rissoa labiosa*, were found in its stomach. In the month of September 1836, one of these birds was seen (by Mr. R. Ball and Dr. Farran) sportively playing at the edge of the water, near Malahide, on the Dublin coast. Close by, on the strand, were a *Lestris catarractes* and a troop of godwits, all of which admitted of a close approach. A phalarope was shot in Dublin Bay soon after Christmas 1837.

In November 1838 one was killed near Malahide, when swimming in the sea, accompanied by two others. A specimen which came under examination in a recent state had been obtained about the 20th of September, 1839, near Portaferry : its stomach, with the exception of a very few seeds of different kinds, was filled with larvæ and perfect insects. At the end of the year 1840, or beginning of 1841, two of these birds were shot on the Down shore of Belfast Bay, about two and a half miles from the town. Mr. R. Davis, jun., of Clonmel, informed me in February 1842, that three individuals only of this species had come under his notice ; one, procured at Ballibrado, near Cahir, county of Tipperary, on the 11th of October, 1841 ; a second, killed the following day on a pool of water close to Clonmel ; a third, seen by him for a long time on the latter day swimming in the middle of the river near the last-named town, and feeding all the while. He remarked that "they all seemed quite unused to man, and, though excellent swimmers and fliers, allowed themselves to be closely approached." At the end of October 1841, an example was killed near Killinchy, county of Down. In a letter from a bird-preserver in Wexford, dated November 6, 1841, it was mentioned that he had a few days before purchased a fresh specimen of a phalarope, shot in that neighbourhood. Birds of this species "appeared in different parts of the south in the winter of 1841-42. Two were taken one day on the river Suir, and another came into the possession of Mr. S. Moss, of Youghal, about the same time."* At the beginning of the year 1842, one was obtained in the neighbourhood of Downpatrick. On the 30th of October, 1843, a phalarope, which was brought to me, had been shot in the Milewater river, near Belfast, where subject to the flow of the tide ; it was described as beating very quickly with its feet in swimming, and nodding its head much : the shooter remarked, that although fowling in the bay for twelve years he had not met with one of these birds before.

On the 6th of December, 1844, a wild-fowl shooter killed at a

* Fauna of Cork, p. 13.

shot on Conswater, where it empties itself into the channel, Belfast Bay, two grey phalaropes; he had seen them there together for a few days previously, and described them as proud-looking little birds, light as corks on the water (a favourite simile), and hardly touching the surface. Their movements were extraordinarily quick as they wheeled about from one side to the other to pick up objects, "quicker than an eddy of wind would waft a feather." Their stomachs, which I examined, were filled with small crustacea (*Idotea*), univalve shell-fish (*Paludina murietica*, Lam.)—of which there were numbers,—and one insect larva.

Late in the autumn of 1846, phalaropes were more widely distributed on the coast, &c. of Ireland, than they had been since the same season of 1831. At the Pigeon-house wall, Dublin Bay, one was killed, on the 13th of September, and in the next month, another, near Raheny in that quarter. On the 9th of October, Mr. R. Chute obtained a specimen (in winter plumage) which was shot near Castle Gregory, on the coast of Kerry, the first bird of the species killed in the county that had come under his notice. On the following day, he procured another (in mixed summer and winter plumage) which was found inland fifteen miles from the sea. In the adjoining county of Cork, an immature bird was shot about the same time. According to Mr. R. Davis, jun., of Clonmel:—"On the 10th of October our cook brought me, living, 'a queer bird' she had caught in our yard in the centre of the town, that proved to be a grey phalarope. I tried to keep it alive, and it fed freely on worms placed in water, but pined away after three or four days. It was much emaciated when taken. The weather had been extremely wet and stormy for some days previously." A single bird was seen at one part of Belfast Bay, on the 14th of October, and two in company at another; the former admitted of a very close approach as it kept feeding in the foam along the edge of the flowing tide. One was shot about this time at Mount Louise (Monaghan), where it was observed to be struck at, on the surface of the water, by crows, from the assaults of which it dived.*

* Robert Evatt, Esq.

Dr. W. R. Scott, of St. Leonard's, Exeter, informs us, in an interesting communication to the 'Zoologist,' that grey phalaropes appeared there in October 1846 in greater numbers than ever before known.*

This species has occasionally been met with about Waterford.†

The preceding details show the occurrence of the phalarope in Ireland at the three seasons of autumn, winter, and spring;‡—its alike resorting to fresh water and the sea;—and its frequent appearance at the same time in Ireland, as that in which it was observed commonly in England. Its visits are of about equal frequency to each of those countries; Scotland would seem to be more rarely visited, but data for the decision of such matters are often wanting with respect to that country. A few killed in winter on the Frith of Forth and the Solway, have come under the notice of Sir Wm. Jardine. The beauty of the bird, together with its liveliness and grace, attracted the highest admiration of all who had the opportunity of seeing it in Ireland.

I do not find the grey phalarope noticed in the histories of British birds, as breeding in any part of the British Islands; but in the more recently published '*Historia Naturalis Orcadensis*,' which appeared in 1848, it is stated to be "found in Sanday and some other islands, in most of which it breeds." Very high northern latitudes, as "Iceland, Greenland, the North Georgian and Melville Islands," || are generally resorted to by this species as breeding-haunts.

Mr. W. Galbraith, a bird-preserved, who had been resident for some time in Belfast, and was well acquainted with different

* No. for March 1849 (vol. vii. p. 2384). The year is printed 1845 in the journal, but considering from the number of these birds which appeared in Ireland in 1846, that this was most probably the year, I wrote to Dr. Scott on the subject, and was politely informed that such was the case; 1845 being a misprint or error in transcribing the note.

† Dr. R. J. Burditt.

‡ Dec. 1849. I saw in the collection of Mr. J. Watters, jun., Dublin, three phalaropes, one of which was shot in the bay there on the 13th of September, 1847. The others were sent in a recent state to a bird-preserved in that city on the 28th of February and 20th of June, 1849, but whence, I could not learn. The last specimen is the only one I have known to be procured in the summer.

|| Yarrell.

species of British and North American birds, sailed from Liverpool to New York in the autumn of 1834, and wrote to an ornithological friend as follows:—"I saw the grey phalarope on the eastern side of the Great Bank of Newfoundland, for two days in pairs and in considerable flocks, sometimes flying and at others sitting on the water quite near the vessel. When we were some hundred miles from land, a number of land birds came on board that must have been carried to sea by a storm;—they were a black-billed cuckoo, a passenger pigeon, a palm warbler, a swallow and some cedar birds, all American species. They came on board several days before our arrival." The dates are not given in any instance.

Audubon, in the 3rd vol. (p. 404) of his 'Ornithological Biography,' gives a pleasing and lively account of this species (under the name of *Phal. fulicarius*) as observed by him on the American shores.

THE RED-NECKED PHALAROPE (*Phalaropus hyperboreus*, Linn., sp.) cannot be said to have visited the Irish coast or inland waters, though it breeds in the north of Scotland and in several of the Orkney Islands. This species appears to be as attractive as the grey phalarope. A highly interesting notice of it in its breeding-haunt in Sutherlandshire will be found in Mr. St. John's Tour in that county, vol. i. p. 59. It is there remarked of a pair:—"Nothing could be more graceful than the movements of these two little birds, as they swam about in search of insects, &c." * * * "Frequently they came within a yard of where I was sitting, and after looking up, they continued catching the small water-insects, &c. on the weeds, without minding my presence in the least." In both hemispheres, this is a northern species. It is a rare visitant to the English shores, and as such only, is known (in autumn or winter) to the European countries south of the British Islands.

The following species of the order *Grallatores* have occurred in Great Britain and not in Ireland :—

1. Cream-coloured Courser,	<i>Cursorius Isabellinus</i> , Meyer.
2. Little Ringed Plover,	<i>Charadrius minor</i> , Meyer.
3. Great White Heron,	<i>Ardea alba</i> , Linn.
4. Buff-backed, or Little White Heron,	„ <i>russata</i> , Temm.
5. Black Stork,	<i>Ciconia nigra</i> , Linn.
6. Spotted Sandpiper,	<i>Totanus macularius</i> , Linn. (sp.)
7. Brown or Grey Snipe,	<i>Scolopax grisea</i> , Gmel.
8. Pectoral Sandpiper,	<i>Tringa pectoralis</i> , Bonap.
9. Little Crane or Olivaceous Gallinule,	<i>Crex pusilla</i> , Gmel. (sp.)
10. Red-necked Phalarope,	<i>Phalaropus hyperboreus</i> , Linn. (sp.)

The 1st—*Cursorius Isabellinus*—is a native of Africa, but visits the north of that continent only in summer. It is included in the British fauna from four individuals having been obtained in England, and is very rarely observed in any country north of the Mediterranean (Yarr.).

The 2nd, 3rd, 4th, and 5th come much under the same category. But one individual of the *Charadrius minor* (procured at Shoreham in Sussex) is positively recorded as obtained in England. The British Islands lie too far west to be often visited by the species. Though an occasional summer migrant to Sweden, the countries southward of the Baltic Sea are those particularly frequented by it. In England, six, and in Scotland, one, of the *Ardea alba* have been killed. This bird appears to be an occasional visitant only to the countries throughout the more western half of Europe in any latitude : it is more frequent eastward. A single *Ardea russata*, procured in Devonshire so long ago as 1807, is on record as British. The species is chiefly met with in the more southern portions of the east of Europe, and prevails thence eastward (in India commonly) over Asia. Four of the *Ciconia nigra* have been obtained in England,—two of them in the west ;—in Somersetshire and Devonshire. This bird is found especially in the more eastern half of Europe, or eastward of

France. It occasionally migrates to the most northern countries in summer, but winters in warm climates.

The *Crex pusilla* is known as an occasional visitant, of which eight specimens have been noticed in England (Yarr.). It is found in summer in the warmer parts of Europe from central Germany southward.

The *Phalaropus hyperboreus* differs from all the preceding in being a northern bird. It breeds annually in the north of Scotland and the Orkney Islands; but its chief breeding-haunts, in Europe and America, are within the arctic circle. It is known only as a rare visitant to the shores of England, and has occasionally been met with in various European countries southward, to Italy inclusive.

The 6th, 7th, and 8th are North American species. Of the *Totanus macularius*, very few individuals have been known to visit England, and these within the last ten years. It has likewise appeared occasionally about the Baltic Sea and the Rhine. The *Scolopax grisea* (a common bird on the shores of the United States) is included in the British catalogue from six specimens having been procured in England within the present century. In continental Europe, Sweden has been visited by it. Three of the *Tringa pectoralis* have been procured in England since 1830.

In the different works treating of the ornithology of Continental Europe until 1844 (the date of Schlegel's 'Revue Critique,' &c.), it is unnoticed as having occurred there. This bird is found on the eastern coasts both of North and South America.

Two only of the ten species (*Ardea alba* and *Phalaropus hyperboreus*) are included in the Scottish catalogue.

It will be obvious from what has just been stated, that excepting the three North American birds, they should all rather be expected to visit England than Ireland, although there would be nothing extraordinary in any of the species occasionally extending its flight to the farther and more western island. Ireland seems to lie too far west even for the visits of the *Phalaropus hyperboreus*; in England the eastern counties of Northumberland, Yorkshire, and Norfolk only, are named by Yarrell as having

been visited by it; but to these, Sussex has subsequently been added in the pages of the 'Zoologist' (vol. iv. p. 1394).*

I am not aware that any Grallatorial species unknown to Great Britain has been procured in Ireland. I do not except the *Galinula Martinica*, owing to its having been dead (though fresh) when washed ashore in Kerry.

* The data on which the preceding brief summary is founded have been derived chiefly from the second edit. of Mr. Yarrell's 'British Birds,' published in 1845.

ENGLISH

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